From: Detwiler Scott MSA HEEN <Scott.Detwiler@zf.com>

Sent: Monday, November 14, 2022 4:49 PM

To: Alger, Brandon (EGLE)

Cc: Owens, Paul (EGLE); HagyL; NoetzelK1; cwuerth; WILSONC3; Yusko-Kotimko, Tiffany

(EGLE); McInnis, John; Martorano Kelly; Bleazard Robert; BOWLINGD; Sclafani, Troy; SynkP; AllisonYokomD; KeatleyA; NellerM; MOSHERJ1; YORDANICHD; MillerM61;

GGilezan; Stewart, Paul

Subject: Revised Technical Summary Report and Contingency Plan

Attachments: 221114 Updated ZF (former Kelsey-Hayes Tech Summary Report and Contingency Plan

(Milford).pdf; Cover Letter Technical Summary Report ZF Milford Site (AO-RRD-22-001)

111422.pdf

Hello Brandon,

Attached please find a cover letter and revised Technical Summary Report and Contingency Plan for the ZF (former Kelsey Hayes site) in Milford. This Report is in response to EGLE's June 28th letter advising ZF that we could submit a summary of our technical arguments, Monitoring Plan and Contingency Plan and further discussions between EGLE and ZF on next steps on this project. Once you and other EGLE personnel have had a chance to review the Report, ZF would welcome and opportunity to discuss any questions.

Since this is a rather large file, please let me know that you have received it.

If you have any questions, please feel free to reach out to either John McInnis or myself.

Thanks,

Scott

Kind regards Scott Detwiler CSP Senior Regional EHS Manager

ZF Group Environmental, Health and Safety 11202 E. Germann Rd., Mesa, AZ 85212

Phone: 480-722-4139, Mobile: 480-600-7433, Fax: 480-722-4254

E-Mail: scott.detwiler@zf.com

VIA EMAIL: AlgerB@michigan.gov AND CERTIFIED MAIL Department; From:

Environmental, Health and Safety

From: Phone: Email: Date: Scott Detwiler +1 480-722-4139 Scott Detwiler #21 com November 14, 2022

Brandon Alger, Project Manager
Warren District Office, Remediation and Redevelopment Division
Michigan Department of Environment, Great Lakes, and Energy
27700 Donald Court
Warren, Michigan 48092

RE: ZF Active Safety US Inc. Updated Technical Summary Report Related to the Administrative Order for Response Activity Regarding the Former Kelsey-Hayes Company Site Located at 101 Oak Street, Milford, Oakland County, Michigan; EGLE Docket No. AO-RRD-22-001; Facility Id. No. 63000952.

Dear Mr. Alger,

ZF Active Safety US Inc. (ZF) is providing the attached updated Technical Summary Report, which is intended to replace the prior version of the Technical Summary Report submitted by ZF to the Department of Environment, Great Lakes, and Energy (EGLE) on August 9, 2022 in connection with Administrative Order for Response Activity, EGLE Docket No. AO-RRD-22-001 (the "AO") for the Former Kelsey-Hayes Company site located at 101 Oak Street, Milford, Oakland County, Michigan, (the "Site").

The updated Technical Summary Report is provided in response to EGLE's letter dated June 28, 2022 (the "June 28th Letter"), wherein EGLE states that, "if, at any point, ZF believes it has collected sufficient data to make any conclusions requiring EGLE concurrence, ZF must provide EGLE with the following documentation (at a minimum) for consideration: (i) A letter outlining any conclusions reached, and a request for EGLE concurrence with the conclusions; (ii) A Technical Summary Report; (iii) A Monitoring Plan; and (iv) A Contingency Plan." Furthermore, following ZF's initial submittal of the Technical Summary Report, EGLE, ZF and their respective consultants, met several times to discuss certain items in the Technical Summary Report and based upon those discussions, ZF prepared this updated Technical Summary Report.

The updated Technical Summary Report includes the following noteworthy updated or revised information:

- (i) The results of additional samples collected from OW-16D2 and replacement monitoring wells (OW-16D2R1 and OW-16D2R2) between August 2022 and October 2022, all of which have demonstrated that detectable levels of vinyl chloride are not present in the groundwater in that location; and
- (ii) Minor edits to the text of the Monitoring Plan section (no changes to the plan for monitoring);
- (iii) An updated Contingency Plan;

(iv) Exhibit 16 – Additional Technical Information (In response to the September 22, 2022 Email from EGLE).

Finally, contemporaneous with its review of the updated Technical Summary Report, EGLE should review the information presented in ZF's letter submitted on August 9, 2022, which further sets forth ZF's conclusions, a request for EGLE's concurrence, and a request by ZF to withdraw the AO. See the "ZF August 9, 2022 Letter," attached. Upon withdraw of the AO, the Monitoring Plan and Contingency Plan, as presented in the attached updated Technical Summary Report will be included in a Response Activity Plan applicable to the Site. ZF also requests that EGLE immediately suspend the requirements under the AO while it considers a withdrawal of the AO.

ZF appreciates the opportunity to work with EGLE on the details of the updated Technical Summary Report and we look forward to hearing from EGLE regarding its concurrence with the conclusions presented by ZF and the status of the AO. Thank you for your attention to this matter and please include this letter and its attachments in the administrative record for the AO and the Site.

If you have any questions, please contact me at the phone number listed in the header on the first page of this letter, Mr. Robert Bleazard – ZF Senior EHS Manager, Environmental Remediation at 480-722-4866, or Mr. John McInnis of Arcadis at 248-994-2285.

Sincerely

Scott Detwiler

Senior Regional Manager

ZF Environmental, Health and Safety

Enclosures cc by email only:

Mr. Robert Bleazard, ZF

Ms. Kelly Martorano, ZF

Mr. John McInnis, Arcadis

Mr. Troy Sclafani, Arcadis

Mr. Grant Gilezan, Dykema

Mr. Paul Stewart, Dykema

Mr. Christian Wuerth, Village Manager, Village of Milford

Ms. Polly Synk, Michigan Department of Attorney General

Ms. Danielle Allison-Yokom, Michigan Department of Attorney General

Mr. Aaron B. Keatley, EGLE - Chief Deputy Director

Mr. Michael Neller, EGLE - Remediation and Redevelopment Division Director

Mr. Josh Mosher, EGLE – Remediation and Redevelopment Assistant Director

Mr. Dan Yordanich, EGLE

Ms. Mary Miller, EGLE

Mr. Darren Bowling, EGLE

Mr. Paul Owens, EGLE

Ms. Cheryl Wilson, EGLE

Ms. Lyndsey Hagy, EGLE

Ms. Katie Noetzel, EGLE

Attachment

ZF August 9, 2022 Letter



ZF Active Safety US Inc. 12001 Tech Center Drive, Livonia, Michigan 48150-2122

VIA EMAIL: AlgerB@michigan.gov

AND CERTIFIED MAIL

Department:

Environmental, Health and Safety

From: Phone: Email: Date:

Scott Detwiler +1 480-722-4139 Scott.Detwiler@zf.com August 9, 2022

Brandon Alger, Project Manager Warren District Office, Remediation and Redevelopment Division Michigan Department of Environment, Great Lakes, and Energy 27700 Donald Court Warren, Michigan 48092

RE: ZF Active Safety US Inc. Response to Department of Environment, Great Lakes, and Energy Letter Dated June 28, 2022 and Additional Information Regarding the Administrative Order for Response Activity Regarding the Former Kelsey-Hayes Company Site Located at 101 Oak Street, Milford, Oakland County, Michigan; EGLE Docket No. AO-RRD-22-001; Facility Id. No. 63000952.

Dear Mr. Alger,

ZF Active Safety US Inc. (ZF) is providing the following information and attachments to the Department of Environment, Great Lakes, and Energy (EGLE) for further consideration and review regarding the Administrative Order for Response Activity, EGLE Docket No. AO-RRD-22-001 (the "AO") for the Former Kelsey-Hayes Company site located at 101 Oak Street, Milford, Oakland County, Michigan, (the "Site"). This information is also provided in connection with EGLE's letter dated June 28, 2022 (the "June 28th Letter"), wherein EGLE states that, "if, at any point, ZF believes it has collected sufficient data to make any conclusions requiring EGLE concurrence, ZF must provide EGLE with the following documentation (at a minimum) for consideration: (i) A letter outlining any conclusions reached, and a request for EGLE concurrence with the conclusions; (ii) A Technical Summary Report; (iii) A Monitoring Plan; and (iv) A Contingency Plan."

The purpose of the information provided in this letter and the Technical Summary Report attached hereto, is to present clear and convincing evidence to support a request by ZF and concurrence by EGLE to withdraw the AO. The Monitoring Plan and Contingency Plan, as presented in the attached Technical Summary Report will be included in a Response Activity Plan applicable to the Site. ZF also requests that EGLE immediately suspend the requirements under the AO while it considers a withdrawal of the AO.

The attached Technical Summary Report includes the detailed information regarding the substantial investigations that ZF and its consultant, Arcadis, have completed since March 2022, to further investigate the condition of the observation well (OW-16D2) and the aquifer characteristics near the Village of Milford (VOM) drinking water wells. The result of the investigations and the additional data gathered by ZF establishes that vinyl chloride is not present in groundwater at OW-16D2 at concentrations that would pose an imminent and substantial endangerment to the public health, safety, welfare, or the environment. Therefore, the basis for the AO is not supported by the current facts and circumstances and the requirements of the AO should be immediately suspended and the AO withdrawn and replaced with a Response Activity Plan. The Technical Summary Report discusses the following information:

- (i) Background information and a chronology regarding the presence of vinyl chloride in samples from OW-16D2 that were above the Drinking Water (DW) criteria and formed the primary basis for the AO;
- (ii) Subsequent investigations that determined OW-16D2 was in a compromised condition at the time of the water sampling that was relied upon to form the primary basis of the AO and therefore, the vinyl chloride detection data from OW-16D2 was inaccurate and does not support the findings of fact and determinations in the AO;
- (iii) The additional work completed by ZF/Arcadis, since March 2022, to redevelop OW-16D2 and simultaneously install good quality replacement monitoring wells (OW-16D2R1 and OW-16D2R2) and the subsequent sampling of the redeveloped OW-16D2 well and the new monitoring well OW-16D2R1, all of which have demonstrated that detectable levels of vinyl chloride are not present in the groundwater in that location; and
- (iv) The Monitoring Plan and Contingency Plan requested in EGLE's June 28, 2022 Letter.

The additional information presented in the Technical Summary Report supports a finding by EGLE that the AO should be withdrawn because there is no objectively reasonable basis or technical information to conclude under Part 201 of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), MCL §324.20101 et seq. ("Part 201") that, as stated in Paragraphs 4.8 and 4.11 of the AO: (1) vinyl chloride is present in the groundwater at the location of observation well OW-16D2 and it presents an imminent and substantial endangerment to the public health, safety, welfare, or the environment within the meaning of Section 20119 of NREPA, MCL §324.20119; and (2) the groundwater impacts from the Site are the source of vinyl chloride in OW-16D2.

The Technical Summary Report shows that vinyl chloride is not present in the groundwater at OW-16D2 at or above the reporting limit of 1.0 ug/L. Pursuant to the Monitoring Well Rehabilitation and Vertical Aquifer Profiling (VAP) Work Plan submitted to EGLE on April 22, 2022 (the "Work Plan") and follow-up correspondence from EGLE on May 4, 2022, ZF has gathered additional information to better understand the presence and lateral and vertical distribution of chlorinated volatile organic compounds (CVOCs) in groundwater near OW-16D2. Vertical aquifer profiling (VAP) was completed at three points near OW-16D2. Vinyl chloride was not detected at or above the reporting limit of 1.0 ug/L in any of the 36 groundwater samples collected from the three VAP borings. In addition, ZF installed two new observation wells (OW-16D2R1 and OW-16D2R2) nearby OW-16D2. The results of the groundwater sampling of the new monitoring well OW-16D2R1 has consistently rendered results that are non-detectable (non-detect) for vinyl chloride. The new monitoring well OW-16D2R2 was sampled on August 8, 2022 and analytical results will be shared with EGLE upon receipt.

Furthermore, the information presented in the Technical Summary Report shows that scale build-up and compromised well conditions at OW-16D2 were the source of vinyl chloride in water samples collected from the well in May and August 2021, and in January and February 2022. Once OW-16D2 was redeveloped in April 2022, and groundwater from the formation could flow more freely into the well screen, the water samples from OW-16D2 on April 4, 8, and 18, May 18, June 8, and July 11, 2022 have consistently shown no detectable concentrations of vinyl chloride at or above the reporting limit of 1.0 ug/L. This also includes the split water samples collected by the VOM/John Wood Group PLC (Wood) on April 4, 8, 18, May 18, June 8, and July 11, 2022. Based on the information that has been documented about OW-16D2, such as significant scale build-up and stagnant water conditions, it is clear that OW-16D2 had become compromised and sample results obtained from the well prior to the redevelopment are not reliable because they were not representative of actual in-situ groundwater conditions. Therefore, the groundwater impacts from the Site are not the source of vinyl chloride in OW-16D2 and vinyl chloride is not present in the groundwater at OW-16D2 at or above the reporting limit of 1.0 ug/L.

Specifically, the non-detect vinyl chloride results for six consecutive post-redevelopment sampling events at OW-16D2, the non-detect vinyl chloride results in the 36 groundwater samples collected from the three VAP borings, and the non-detect vinyl chloride results in the new well, OW-16D2R1, confirms that CVOCs present in groundwater in the vicinity of OW-16D2 are stable and not degrading to vinyl chloride, which is also consistent with the sampling results throughout ZF's monitoring well network during the past 25 years; as further discussed in the Technical Summary Report and its attachments.

As outlined above and in the Technical Summary Report, the prior understanding of the circumstances at OW-16D2 and the samples collected in May and August 2021 and January and February 2022, has been replaced by subsequent competent, material, and substantial evidence that disproves the basis for the determinations in the AO. Therefore, EGLE's conclusion that vinyl chloride in impaired well OW-16D2 presents an imminent and substantial endangerment to the public health, safety, welfare, or the environment should be adjusted and the AO should be withdrawn. Instead, EGLE should allow ZF to proceed on the basis of its technical findings to date, as outlined in the Technical Summary Report, and on the performance of the Monitoring Plan and the Contingency Plan. The AO should be withdrawn and replaced with a Response Activity Plan, which would still provide EGLE and ZF the administrative structure to continue routine monitoring of the ZF wells that are in close proximity to the VOM wells and rely on the Contingency Plan to implement appropriate response actions if the routine monitoring indicates any threat to the VOM wells. The Monitoring Plan and the Contingency Plan proposed by ZF, coupled with a Response Activity Plan that provides an administrative framework and process that can be relied on by both ELGE and ZF, will still meet the objectives of ensuring the protection of public health, safety, welfare, and the environment. Furthermore, ZF has already completed a significant portion of the work included in the Performance Objectives under the AO, with the input and approvals of EGLE and the VOM, including water treatment system design plans and a Part 399 Permit Application. Therefore, ZF could easily utilize this body of work to support and quickly implement the items in the Contingency Plan, if necessary. ZF has collected a significant amount of compelling information and data since March 2022, related to the compromised condition and unreliable results for OW-16D2 prior to well redevelopment, and with respect to the groundwater aquifer, which confirms and supports the conclusion that there is no imminent and substantial endangerment or threat to the VOM drinking water wells based on vinyl chloride in the groundwater at OW-16D2.

ZF appreciates the opportunity to work with EGLE and obtain feedback throughout the process of developing and implementing the Work Plan. ZF would like to continue to engage with EGLE regarding both the progress of the technical work at the Site and with respect to ZF's request to withdraw the AO, suspend the requirements under the AO while EGLE considers withdrawing it, and implement a Response Activity Plan for the Site. We would like the opportunity to meet with EGLE to discuss a Response Activity Plan that meets the objectives of both EGLE and ZF, as well as the VOM where applicable. ZF remains committed to complying with Part 201 requirements for the Site and continuing our collaborative work with EGLE and the VOM to protect the VOM's valuable drinking water resource. Thank you for your attention to this matter and please include this letter and its attachments in the administrative record for the AO and the Site.

If you have any questions, please contact me at the phone number listed in the header on the first page of this letter, Mr. Robert Bleazard – ZF Senior EHS Manager, Environmental Remediation at 480-722-4866, or Mr. John McInnis of Arcadis at 248-994-2285.

Sincerely,

Scott Detwiler

Senior Regional EHS Manager ZF Environmental, Health and Safety

Enclosures cc by email only:

- Mr. Robert Bleazard, ZF
- Ms. Kelly Martorano, ZF
- Mr. John McInnis, Arcadis
- Mr. Troy Sclafani, Arcadis
- Mr. Grant Gilezan, Dykema
- Mr. Paul Stewart, Dykema
- Mr. Christian Wuerth, Village Manager, Village of Milford
- Ms. Polly Synk, Michigan Department of Attorney General
- Ms. Danielle Allison-Yokom, Michigan Department of Attorney General
- Mr. Aaron B. Keatley, EGLE Chief Deputy Director
- Mr. Michael Neller, EGLE Remediation and Redevelopment Division Director
- Mr. Josh Mosher, EGLE Remediation and Redevelopment Assistant Director
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- Ms. Mary Miller, EGLE
- Mr. Darren Bowling, EGLE
- Mr. Paul Owens, EGLE
- Ms. Cheryl Wilson, EGLE
- Ms. Lyndsey Hagy, EGLE
- Ms. Katie Noetzel, EGLE

<u>Attachment</u>

Technical Summary Report

Technical Summary Report



SUBJECT

Former Kelsey-Hayes Plant, 101 Oak Street Oakland County, Michigan EGLE Facility ID No. 63000952 **TO**Brandon Alger
Michigan Department of Environment,

Great Lakes, and Energy

DATE

November 14, 2022

On behalf of ZF Active Safety US Inc. (ZF), Arcadis of Michigan, LLC (Arcadis) first prepared and submitted this Technical Summary Report on August 9, 2022, in response to the Michigan Department of Environment, Great Lakes, and Energy's (EGLE's) letter dated June 28, 2022 (the "June 28th Letter") and in connection with the Administrative Order for Response Activity, EGLE Docket No. AO-RRD-22-001 (the "AO"), for the former Kelsey-Hayes Company site located at 101 Oak Street, Milford, Oakland County, Michigan (the "Site"). ZF has since revised the Contingency Plan portion of the first version of the Technical Summary Report in response to comments received from EGLE and added additional technical information (See Attachment 16) in response to the September 22, 2022, electronic email from EGLE. ZF also updated portions of the Technical Summary Report to include the additional data collected from OW-16D2, OW-16D2R1, and OW-16D2R2 during the months of August, September, and October 2022. The purpose of this Technical Summary Report is to provide EGLE with documentation and additional information regarding the work that has been completed by ZF and Arcadis to date, to further investigate the condition of ZF observation well, OW-16D2, and evaluate chlorinated volatile organic compounds (CVOCs), particularly vinyl chloride, in the area of OW-16D2 and near the Village of Milford (VOM) municipal drinking water wells. This Technical Summary Report will demonstrate that: (i) the condition of OW-16D2 was compromised at the time the samples with vinyl chloride above the drinking water (DW) criteria were collected from the well, which was the basis for the AO; (ii) groundwater from the aquifer does not contain vinyl chloride at or above the reporting limit of 1.0 ug/L; (iii) the current condition of the compounds in the aquifer is stable.

This Technical Summary Report consolidates information and data previously submitted to EGLE in letters and data submitted between March 16, 2022, and July 13, 2022, and also includes the details of the investigations performed and data recently collected by Arcadis regarding monitoring well OW-16D2 and two new monitoring wells installed to analyze the groundwater near OW-16D2. In addition, this Technical Summary Report incorporates a Monitoring Plan and a Contingency Plan (revised), as requested in the June 28th Letter.

BACKGROUND AND CHRONOLOGY OF EVENTS

The background and chronology of events described in the following paragraphs is focused on information related to OW-16D2 and the data, observations, correspondence, and work performed in connection with OW-16D2 and the AO, from May 2021 to date.

ZF is the corporate successor to the prior operator of the Part 201 Facility located at the Site. As part of its obligations related to the Site, ZF has been collecting samples from a network of off-site wells, including OW-16D2, since 1998. Observation Well OW-16D2 is located approximately 200 feet from the Village of Milford (VOM) municipal drinking water wells. Vinyl chloride had not been detected above the DW criteria in any samples collected from OW-16D2 until May 2021, and then August 2021. Based on these results, ZF proposed to increase the sampling frequency for OW-16D2 from semi-annual sampling to bi-weekly sampling for three months and if concentrations of vinyl chloride remained below the DW criteria for six consecutive sampling events, the sampling

frequency would be monthly for the following three months, and return to semi-annually if no vinyl chloride was detected. EGLE agreed to the sampling plan via email from Mr. Kevin Wojciechowski on July 20, 2021. In addition, after the detections of vinyl chloride in May and August 2021, ZF and Arcadis reviewed the extensive data collected for the Site, as well as other available information for soil sampling and monitoring wells in the vicinity of the Site, to try to understand the emergence of vinyl chloride in OW-16D2. Given that vinyl chloride had not previously been detected in ZF's off-site monitoring well network in more than 25 years of monitoring, the emergence of vinyl chloride only in OW-16D2 warranted further review and investigation. In addition, available summaries of data collected by the VOM's consultant, John Wood Group PLC (Wood), for the VOM's drinking water well system showed that vinyl chloride had never been detected in the VOM's municipal wells (approximately 200 feet from OW-16D2) or associated distribution systems during the last 32 years. See Figure 1 (Site Layout) and Figure 2 (Cross Section) for a summary of recent groundwater monitoring results from ZF's monitoring well network, VOM's monitoring well MW-03-94, and the VOM drinking water wells. In addition, trend graphs prepared by Arcadis show decreasing concentrations of CVOCs in groundwater downgradient of the Site. See Attachment 1.

Although trichloroethene and cis-1,2-dichloroethene have historically been detected in Observation Wells OW-2D2, OW-05D2, OW-07D, OW-22, OW-22D, OW-23D, OW-28, and OW-30 (wells downgradient of the Site) from 1994 to 2022 (note: that the exact timeframe varies depending upon the well) vinyl chloride has never been detected in these wells except for an anomalous detection in OW-07D on December 18, 1997. The December 18, 1997 sample was rerun and EGLE had also collected a split sample and neither of those analyses detected vinyl chloride. Observation well OW-07D has been sampled at least 44 times from 1994 to 2022 and vinyl chloride has never been detected in this well other than the one anomalous result, which was not replicated in subsequent sampling. The data from these eight wells, observation wells OW-9, OW-9ML-A/B/C/D, OW-10, OW-10D, OW18D, OW-18ML-A/B/C, and OW-18ML-D/E/F located along West Liberty Street, and the VOM well (MW-03-94), demonstrate that CVOCs including trichloroethene and cis-1,2-dichloroethene are stable below DW criteria in the aquifer and conditions of the aquifer are not conducive for degradation of these compounds to vinyl chloride.

On September 1, 2021, EGLE sent a Compliance Communication regarding the Site to ZF and requested that ZF submit a Response Activity Plan to EGLE within 90 days. On October 25, 2021, EGLE sent ZF another Compliance Communication asking ZF to initiate an interim response measure of installing treatment on the Village of Milford drinking water system. During this time period, ZF continued to collect bi-weekly groundwater samples from OW-16D2 pursuant to the original agreement with EGLE in July 2021. The bi-weekly sampling did not identify vinyl chloride above the DW criteria in samples collected through the end of October 2021 and samples collected in November 2021 and December 2021, also did not reveal vinyl chloride above the DW criteria. ZF responded to EGLE's September 1st and October 25th Compliance Communications on November 23, 2021. See **Attachment 2.**

On January 4, 2022, and January 25, 2022, OW-16D2 was sampled in accordance with the original sampling plan agreed to by EGLE in July 2021 and the water sample results showed vinyl chloride at 2.5 micrograms per liter (ug/L) and 3.2 ug/L, respectively. A water sample was also collected on February 17, 2022, which did not identify vinyl chloride above the DW criteria. All of the sampling results were reported to EGLE via email. See **Attachment 3**.

On March 16, 2022, EGLE issued the AO to ZF on the basis that the presence of vinyl chloride in OW-16D2, "represents an imminent and substantial endangerment to the public health, safety, welfare, or the environment within the meaning of Section 20119 of NREPA, MCL §324.20119."

www.arcadis.com 2/10

Around the time that EGLE issued the AO (late February to early March 2022) Arcadis had been evaluating water level trends at OW-16D2 to determine if the water level drawdown in the well was a result of low-flow sampling or the operation of the nearby VOM drinking water wells. After determining that there was no drawdown in OW-16D2 during operation of the VOM drinking water wells but an anomalous response in water level and certain groundwater parameters in OW-16D2 during sampling, Arcadis raised concerns regarding the possible integrity of the well screen and/or the sand pack surrounding the well screen. In addition, considering the proximity of OW-16D2 to the VOM drinking water wells, ZF and Arcadis carefully analyzed the viability of OW-16D2 and considered whether the groundwater samples collected from this well were representative of the aquifer. Arcadis initially questioned whether OW-16D2 may be compromised because there was significant drawdown in the well during most of the low-flow sampling events where vinyl chloride was detected, and purge volumes were observed to be similar to the volume of standing water removed from the well. Except for a few instances, this was not observed in the past. This indicated stagnant water conditions in the well. In addition, water samples collected from OW-16D2 with vinyl chloride detections had a strong reducing oxidation reduction potential (ORP) in the range of -60 to -134 millivolts and low dissolved oxygen (DO) levels. These conditions within a well provide a reducing environment where anerobic microbes are active and reductive dichlorination of CVOCs can occur (i.e., cis-1,2-dichloroethene to vinyl chloride). Arcadis also noted that vinyl chloride has not been detected in the six observation wells, OW-9, OW-9D, OW-09ML-A/B/C/D, and MW-03-94, located upgradient of OW-16D2, in the VOM drinking water wells, or in any of the other monitoring wells regularly sampled by Arcadis, which have proven to be reliable in monitoring other CVOCs. Therefore, based on these multiple lines of evidence, it appeared that the recent detections of vinyl chloride in OW-16D2 were localized and warranted further review. Finally, the inability of OW-16D2 to sustain EGLE's lowflow sampling stabilization requirements for water level also indicated that groundwater samples collected from OW-16D2 were not representative of groundwater conditions and not suitable for comparison to the Part 201 Cleanup Criteria for compliance purposes. See Attachment 4 for a summary table of laboratory analytical results for the seven upgradient wells and a summary table of laboratory analytical results for OW-16D2 and field parameters.

Based on the observations discussed above, OW-16D2 was further examined and efforts to redevelop the well began on April 1, 2022. The objective of the well redevelopment activities was to improve hydraulic communication between the well and the formation, in order to produce representative groundwater samples. During the examination and redevelopment of OW-16D2, Stearns Drilling Company (Stearns), the well redeveloper, used a surge block with a vacuum hose attachment to work up and down within the well screen and draw out sediments consistent with standard practice. Stearns moved this apparatus up and down within the well screen several times. During the process, there was initial discolored water and some fine sediment removed and then it cleared up. The plan was to then drop a pump down the well and purge water/groundwater as it re-entered the well, removing as much water as possible. However, after pulling the surge block apparatus out of the well, there was only about 2 feet of water remaining in the well (approximately 1/3 gallon). The depth of standing water in the well when Stearns started the redevelopment process was about 100 feet which is equivalent to approximately 16 gallons. This indicates that the well screen, sand pack, and/or formation around the screen was not functioning as designed. Arcadis measured the level of water in the well after this work and it recovered very slowly, at a rate of less than 1 foot per hour. Based on these observations, it appeared that the water in OW-16D2 was stagnant (and existing in an anaerobic condition) and therefore not representative of groundwater conditions present in the aquifer. These initial well redevelopment findings, combined with the observations noted above regarding well behavior during sampling, indicated that OW-16D2 had become compromised and could not be relied on for continued groundwater monitoring without further potential corrective action on the well. See Attachment 5, ZF letter to EGLE dated April 8, 2022.

www.arcadis.com 3/10

Following the redevelopment on April 1, 2022, Arcadis collected water samples from OW-16D2 on April 4, 8, and 18, 2022. The samples were submitted to Fibertec Environmental Services of Holt, Michigan (Fibertec) and Eurofins Canton, Ohio (Eurofins) for analysis of volatile organic compound (VOCs) using United States Environmental Protection Agency (USEPA) Test Method 8260D. The results from all six samples, including associated duplicate samples, indicated non-detectable (non-detect) concentrations of vinyl chloride (less than 1.0 ug/L). In contrast, cis-1,2-dichloroethene, trans-1,2-dichloroethene, and 1,1-dichloroethane were detected below DW criteria and the concentrations of these other CVOCs were consistent with previous samples collected from OW-16D2. This indicated that these compounds were stable in the formation water that entered OW-16D2 after redevelopment and were not degrading to vinyl chloride in the aguifer in the vicinity of OW-16D2. See Attachment 6, summary of laboratory analytical results for OW-16D2 (April 4, 8, and 18, 2022). These findings, along with the OW-16D2 sampling results, and the well redevelopment observations described above, supported Arcadis's prior working hypothesis that, OW-16D2 was compromised and the production of vinyl chloride was occurring in the well resulting from stagnant anaerobic water within the well, and that the vinyl chloride detections were not representative of actual groundwater conditions. Therefore, ZF requested additional time to comply with the AO response deadline and develop and implement a work plan to further investigate, redevelop, and gather representative data from OW-16D2. See Attachment 7, ZF letter to EGLE dated April 13, 2022. EGLE responded to ZF on April 14, 2022, and denied ZF's request for additional time to comply with the AO. However, EGLE concurred that the technical information collected by ZF warranted more investigation and noted that ZF could submit a work plan describing the additional work that would be performed to continue to rehabilitate OW-16D2. EGLE also requested that the work plan include details about vertical aquifer profiling (VAP) in close proximity to OW-16D2 to verify the screen is in the zone of highest contamination, or if the depth of contamination is different than screening interval, installation of a new monitoring well. See Attachment 8, EGLE letter to ZF dated April 14, 2022.

ZF submitted a Monitoring Well Rehabilitation and Vertical Aquifer Profiling Work Plan to EGLE on April 22, 2022 (the "Work Plan"). EGLE responded with comments to the Work Plan on May 4, 2022 and ZF responded to EGLE's comments to the Work Plan on May 15, 2022 (the original Work Plan and the subsequent EGLE and ZF letters are hereafter referred to as the "Work Plan Documents"). See **Attachment 9**, Progress Report No. 1 dated May 15, 2022.

SUMMARY OF INVESTIGATIONS

Pursuant to the Work Plan Documents, ZF proceeded to schedule and implement the work. Well rehabilitation activities at OW-16D2 conducted to date include initial well redevelopment on April 1, 2022, collection of water samples for chemical and biological analysis to determine if the well recharging issues observed during the initial redevelopment are related to scaling or biofouling, and performing a camera survey to assess the integrity of the screen and casing. As described in more detail below, ZF conducted the VAP sampling activities on May 16 through 25, 2022, in close proximity to OW-16D2 (VAP Location No. 1) and at two other locations (VAP Locations No. 2 and 3) west of OW-16D2. The objective of the VAP sampling activities was to further assess the presence and lateral and vertical distribution of CVOCs in groundwater. In addition, on May 26 through 27, 2022, ZF installed a new monitoring well (OW-16D2R1) next to OW-16D2, based on the results from groundwater samples collected at VAP Location No. 1 and in consultation with EGLE. See **Attachment 10**, e-mail from Kevin Wojciechowski dated May 26, 2022. A second additional well (OW-16D2R2) was installed on July 20 and 21, 2022, to monitor the same screened interval as OW-16D2.

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OBSERVATION WELL (OW-16D2) REHABILITATION

As discussed above, Arcadis began performing redevelopment activities on OW-16D2 on April 1, 2022. The initial redevelopment activities included clearing sediments from the well screen and allowing the well to recharge. Since the initial well redevelopment activities, Arcadis has collected water samples from OW-16D2 on nine occasions. Water samples collected on April 4, 8, and 18, and May 18, 2022, were submitted to Eurofins for analysis of VOCs using USEPA Test Method 8260D. Water samples collected on April 4, 8, and 18 were also submitted to Fibertec for expedited analysis of VOCs using USEPA Test Method 8260D. The water samples collected on June 8, July 11, August 8, September 8, and October 3, 2022, were submitted to Fibertec for expedited analysis of VOCs using USEPA Test Method 8260D. Vinyl chloride was not detected (at or above the reporting limit of 1.0 ug/L) in any of the water samples collected since the April 2022 redevelopment of OW-16D2. The consultant for the VOM, Wood, also collected split water samples on April 4, 8, 18, May 18, June 8, July 11, August 8, September 8, and October 3, 2022. The split samples collected by Wood also did not identify vinyl chloride above the DW criteria. The sampling data for OW-16D2 since the initial redevelopment activities on April 1st are presented below.

Sample Identification:		Observation Well OW-16D2															Residentia					
Sample Collection Date:	4/4/2022			4/8/2022			4/18/2022			5/18/2022		6/8/2022		7/11/2022		8/8/2022		9/8/2022		10/3/2022		Drinking Water Criteria
	Fiberted	Eurofins	Wood	Fibertec	Eurofine	Wood	Fiberter	Eurofina	Wood	Fiberted	Wood	Fibertec	Wood	Fibertec	Wood	Fibertec	Wood	Fibertec	Wood	Fiberted	Wood	
Tetrachloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5.0
Trichloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5.0
cis-1,2-Dichloroethene	19	21	17	20	18	17	18	16	14	16	13	19	14	18	10	16	12	21	16	17	16	70
trans-1,2-Dichloroethene	1.7	1.7	2.0	1.5	1.5	2.0	1.3	1.2	1.0	<1.0	<1.0	1.4	2.0	<1.0	<1.0	<1.0	<1.0	1.8	2.0	1.4	1.8	100
1,1-Dichloroethane	3.5	3.8	4.0	3.5	3.0	4.0	3.0	2.4	3.0	3.4	3.0	3.6	3.0	3.5	3.0	3.6	3.0	3.9	4.0	3.2	4.0	880
Vinyl chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.0

All concentrations are in micrograms per liter (ug/L).

The laboratory analytical reports for the samples collected at OW-16D2 since redevelopment are included in **Attachment 11**.

SAMPLE COLLECTION FOR CHEMICAL AND BIOLOGICAL ANALYSIS

Water samples were collected for chemical and biological analysis from OW-16D2 on June 6, 2022. Samples were submitted to Water Systems Engineering Inc., Ottawa, Kansas (WSE). The laboratory analytical results and analysis found a significant potential for mineral scale buildup over time as indicated by the high concentration of dissolved minerals present including hardness, calcium, and alkalinity. The bacterial assessment as well as the microscopic evaluation found strong evidence indicating that the well is heavily impacted by excessive bacterial growth, particularly by slime forming organisms. Recommendations provided by WSE to help restore unrestricted flow between the interior of the well and the aquifer include well rehabilitation involving mechanical brushing, an acid treatment to dissolve mineral scale followed by disinfection to reduce the bacterial load in the well. See **Attachment 12**, complete well profile analysis report from WSE.

MONITORING WELL CAMERA SURVEY

A down well camera survey was conducted on July 21, 2022, to further assess the condition of OW-16D2. As expected, the camera survey showed significant build-up of sediments on the well screen. In addition to the findings from the chemical and biological analysis, this provides further evidence that OW-16D2 had become compromised. See **Attachment 13**, downhole photographs of the well screen.

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VAP WORK

The VAP borings were advanced to approximately 5 feet into the clay stratum that was encountered at the bottom of the aquifer. Groundwater samples were collected at 10-foot intervals from the water table to 120 feet below ground surface (bgs). Groundwater samples were submitted to Fibertec for analysis of VOCs using USEPA Test Method 8260D. A summary of the laboratory analytical results and the laboratory analytical reports were submitted to EGLE and the VOM and are included in **Attachment 14**. In summary, vinyl chloride was not detected in any of the 36 groundwater samples collected from the three VAP borings.

VAP Location No.1 was advanced next to OW-16D2 and was used to verify the zone of highest contamination for installation of new well OW-16D2R1. As stated in EGLE's May 4th letter, the zone of highest contamination is defined as, "the zone of the highest detected concentration of vinyl chloride, or if no vinyl chloride is detected, as the zone with the highest total VOCs." Laboratory analytical results from VAP Location No. 1 indicated no detections of vinyl chloride. The zone with the highest total VOCs at VAP No. 1 was the groundwater sample collected from 85 to 90 feet bgs, which consisted of 1,1 dichloroethane (2.2 ug/L), cis-1,2-dichloroethene (19 ug/L), trans-1,2-dichloroethene (1.3 ug/L), and toluene (4.7 ug/L). Toluene is not a constituent of concern associated with the Site and this constituent may be associated with the former Leaking Underground Storage Tank sites directly to the north at the intersection of Commerce Road and Main Street. In the groundwater samples collected from VAP Location No. 2, only cis-1,2-dichloroethene (1.5 ug/L) was detected at a depth of 45 to 50 feet bgs. In the groundwater samples collected from VAP Location No. 3, only toluene was detected (1.5 and 1.0 ug/L) at 15 to 20 feet bgs and 105-110 feet bgs, respectively. Again, toluene is not a constituent of concern related to the Site and is likely from another upgradient source. In summary, vinyl chloride was not detected (at or above the reporting limit of 1.0 ug/L) in any of the 36 groundwater samples collected from the three VAP borings.

NEW OBSERVATION WELLS

Observation well 16D2R1 (OW-16D2R1) was installed on May 26 and 27, 2022 and is screened at the 85 to 90 feet bgs interval based on EGLE's statements in the May 4th letter and further e-mail confirmation from Mr. Wojciechowski on May 26, 2022. See **Attachments 9 and 10**. Groundwater samples were collected from OW-16D2R1 on June 8, July 11, August 8, September 8, and October 3, 2022, and submitted to Fibertec for expedited analysis of VOCs using USEPA Test Method 8260D. Laboratory analytical results are included in **Attachment 15**. Vinyl chloride was not detected in OW-16D2R1 at or above the reporting limit of 1.0 ug/L.

A second new observation well (OW-16D2R2) was installed on July 20 and 21, 2022, and is screened at 95 to 100 feet bgs to monitor the deeper interval, and to match the well-screen depth of OW-16D2, though it was not the zone of highest contaminant concentration in VAP-1 as defined by EGLE. Groundwater samples were collected from OW-16D2R2 on August 8, September 8, and October 3, 2022, and submitted to Fibertec for expedited analysis of VOCs using USEPA Test Method 8260D. Laboratory analytical results are included in **Attachment 15**. <u>Vinyl</u> chloride was not detected in OW-16D2R2 at or above the reporting limit of 1.0 ug/L.

The information presented above provides additional support for ZF's and Arcadis's prior assertions that OW-16D2's connection to the groundwater in the aquifer was compromised and was not providing representative samples from the aquifer prior to redevelopment on April 1, 2022 (beginning May 2021 through March 2022). Results from the April, May, June, July, August, September, and October 2022 samples collected following the April 2022 redevelopment of OW-16D2 are consistent with, and further support our understanding that, OW-16D2 had become compromised and sample results obtained from the well prior to the redevelopment on April 1, 2022, are not reliable

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because they were not representative of actual in-situ groundwater conditions. Specifically, the non-detect vinyl chloride results now for nine consecutive post-redevelopment sampling events at OW-16D2, the non-detect vinyl chloride results in the groundwater samples collected in the 36 groundwater samples from the three VAP borings, and the non-detect vinyl chloride results in the new wells (OW-16D2R1 and OW-16D2R2) next to OW-16D2, confirms that CVOCs present in groundwater in the vicinity of OW-16D2 are not degrading to vinyl chloride, which is also consistent with the sampling results throughout ZF's monitoring well network for more than 25 years. These data demonstrate that the former Kelsey-Hayes site plume is adequately defined to applicable Part 201 criteria, the existing groundwater capture and treatment system is effectively capturing and treating impacted groundwater from the Site, reducing contaminant concentration and extent, and that the remaining CVOC impacts from the Site do not represent an unacceptable risk to the VOM's drinking water wells, while ZF continues to implement its ongoing groundwater cleanup and monitoring.

Based on 21 groundwater samples collected from OW-16D2 since the April 1, 2022 redevelopment, with no detections of vinyl chloride, it has been confirmed that the vinyl chloride that had been detected in OW-16D2 prior to the redevelopment April 1, 2022 (beginning May 2021 through March 2022) was the result of stagnant anaerobic water within the well and not representative of in-situ groundwater conditions. In addition, the absence of vinyl chloride in groundwater is further confirmed by the recent non-detect vinyl chloride results obtained from 14 groundwater samples collected at VAP No. 1, five groundwater samples collected from OW-16D2R1, and three groundwater samples collected from OW-16D2R2. In addition, collectively these data are consistent with and further support ZF's Conceptual Site Model presented to EGLE in our letter dated November 23, 2021, and during the AO conference on March 31, 2022, and reinforce ZF's assertions that vinyl chloride is <u>not</u> present in groundwater in the vicinity of OW-16D2 and does not pose an imminent and substantial endangerment to the VOM municipal drinking water system.

MONITORING PLAN

This monitoring plan has been developed to collect samples from OW-16D2R1 and OW-16D2R2 (the "Observation Wells") and compare the sampling results to applicable Part 201 criteria for vinyl chloride in drinking water (2.0 ug/L or current Part 201 promulgated value) and collect additional samples from the Observation Well(s) as needed. The Observation Wells will be sampled on a monthly frequency for the 6 months following approval of this Technical Report by EGLE, for the analysis of VOCs using USEPA method 8260D. Laboratory analysis of the samples collected each month will be completed on a standard turnaround time. The laboratory analytical results from the sampling of the Observation Wells will be provided to EGLE and the VOM within 4 business days of receiving the results from the laboratory. If the result from either Observation Well shows vinyl chloride at concentrations that exceed the applicable DW criteria, ZF will notify EGLE and the VOM within 1 business day of receiving the result from the laboratory and the Observation Well(s) will be resampled within 4 business days, and again within 8 business days, of receiving the first sample result showing vinyl chloride above the applicable DW criteria. Laboratory analysis of the verification samples will be completed with expedited laboratory turnaround time. If the verification sampling results from the Observation Well(s) also show vinyl chloride at concentrations that exceed the applicable DW criteria, then the Contingency Plan set forth below will be implemented. If the verification samples from the Observation Well(s) do not show vinyl chloride at concentrations exceeding the applicable DW criteria, then ZF will resume monthly sampling. If vinyl chloride is not detected above applicable DW criteria during any consecutive six-month period, then the sampling frequency of the Observation Wells will be reduced to quarterly for 1 year. If vinyl chloride is not detected above applicable DW criteria for 1 year, then the sampling frequency of the Observation Wells will be reduced to semi-annually, which is consistent with the current site-wide monitoring program for the Site.

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CONTINGENCY PLAN

This Contingency Plan has been developed to describe the actions that will be implemented if vinyl chloride above the applicable DW criteria is verified in the Observation Well(s) pursuant to the process set forth in the monitoring plan included above.

ZF will continue to work with the EGLE, Drinking Water and Environmental Health Division – Warren District Office (DWEHD – WDO) to complete the currently ongoing Act 399 construction permit review process, including submittal of any updated supporting plans and specifications that describe the work necessary to implement the treatment system set forth in ZF's Act 399 permit application. ZF will coordinate with EGLE on the permit review process in parallel with the process of withdrawing and replacing the AO, so that a complete Act 399 permit package can be reviewed by EGLE, and a construction permit ("Permit") can be issued to the Village of Milford. The Permit will clearly state that any material or equipment procurement, or construction activities, will only commence when triggered by the events set forth in this Contingency Plan. If the Permit requirements are not triggered under this Contingency Plan within 2 years of the date of issuance of the Permit, and the first extension period (to be limited to an additional 2 years), then ZF may request that EGLE remove the requirement to have an active, issued, Act 399 Permit as part of its Contingency Plan. To support its request, ZF shall present data showing that vinyl chloride above the applicable DW criteria has not been identified in the Observation Well(s) and there is no imminent and substantial threat to the Village of Milford water supply.

If the verification sampling results from the Observation Well(s) show vinyl chloride at concentrations that exceed the applicable DW criteria, then an initial evaluation of the condition of the Observation Well(s) will be conducted within 1 business day, to determine if the Observation Wells are functioning properly. Initial evaluation will specifically involve evaluation of the drawdown within the Observation Well(s) under low-flow purging rates (100 to 150 milliliters per minute). If the well is unable to sustain low-flow purging rates without significant draw-down, or if the total amount of water purged from the well is similar to the volume of standing water measured in the well before purging, then stagnant water conditions likely exist and one or both of the Observation Wells may be compromised and not rendering sampling results representative of actual aquifer conditions. Based on the information obtained during the initial evaluation, one or both of the Observation Wells may require rehabilitation or replacement.

If an Observation Well is determined to be compromised, ZF will prepare a plan to rehabilitate or replace the well and submit it to EGLE for review within 5 business days. Rehabilitation measures may include surging/pumping, jetting, air lifting, mechanical scrubbing, and injecting approved additives into the Observation Well(s). It is expected that these rehabilitation measures could be performed within 2 weeks, subject to EGLE approvals, and contractor and equipment availability. If replacement of an Observation Well is necessary, it is anticipated that drilling a new well could be completed within 1 month, subject to EGLE approvals, and contractor and equipment availability. Once an Observation Well is rehabilitated or replaced, the Observation Well will be resampled/sampled in one week (per EGLE guidelines) with expedited laboratory analysis. ZF will provide EGLE with the results of the resampling/sampling within 1 business day of receipt from the laboratory.

If the Observation Well is determined to be functioning properly after rehabilitation, ZF will resample the Observation Well 1 more time within 1 business day of that determination, with expedited laboratory analysis. ZF will provide EGLE the results of the resampling within 1 business day of receipt from the laboratory.

If the Observation Well has been rehabilitated or a replacement well has been installed and the resampling/sampling results show vinyl chloride in excess of applicable DW criteria, then ZF will meet with EGLE and the VOM within 5

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business days to coordinate implementation of the treatment system set forth in the Permit. Activities to implement the Permit include:

- Place equipment purchase orders 5 days after confirmation of a detection of vinyl chloride greater than DW criteria in the Observation Well(s) referenced in the Monitoring Plan;
- Release bid package for contractor consideration 2 weeks after confirmation of a detection of vinyl
 chloride greater than DW criteria in the Observation Well(s) referenced in the Monitoring Plan;
- Award project 30 days after release of bid package.

A more detailed schedule will be created and provided to EGLE and the VOM after the project is awarded and equipment delivery timing is confirmed.

At any point, ZF may conduct additional investigation activities, including but not limited to additional sampling, groundwater flow and transport modeling, and forensic analysis to further evaluate the source of any vinyl chloride that could potentially be detected in groundwater at the Observation Wells at concentrations above applicable DW criteria. ZF would notify EGLE of its intent to collect and analyze such data, and present the data, methodologies, and determinations to EGLE. If the additional information indicates that the former Kelsey Hayes site is a valid potential source of vinyl chloride in the area of the Observation Wells, then ZF will continue its obligations under this Contingency Plan. If it is determined that the former Kelsey-Hayes site is not a valid potential source of vinyl chloride in the area of the Observation Wells, ZF may submit a request to EGLE to discontinue this Contingency Plan. ZF may also elect to evaluate whether there are alternative, equally protective, groundwater treatment technologies that have become available and propose any such technologies to EGLE and VOM for approval in place of the treatment system described in the Act 399 Permit. This Contingency Plan may be modified, amended, or terminated upon the written consent and approval of ZF, EGLE and the VOM.

This Contingency Plan is protective of public health for the following reasons:

- The previous vinyl chloride detections above DW criteria at OW-16D2 have been shown to be a result of stagnant anaerobic water within a compromised and malfunctioning monitoring well, not representative of the groundwater conditions, and no other wells or VAP borings in the vicinity have ever yielded vinyl chloride detections.
- Previous detections of vinyl chloride within the compromised OW-16D2 at concentrations ranging from 1.2 to 3.5 ug/L from May 2021 through March 2022 did not result in a detectable concentration of vinyl chloride in any other wells, including the VOM drinking water wells (vinyl chloride has never been detected at any time in the VOM drinking water wells).
- The existing VOM iron removal plant is estimated to have a 50% removal efficiency for vinyl chloride, affording
 current safeguards against vinyl chloride concentrations exceeding DW criteria in the water being supplied by
 the VOM drinking water wells.
- Should drinking water monitoring data indicate the presence of vinyl chloride or other VOCs in the Village of Milford drinking water at levels exceeding the maximum contaminant level (MCL), ZF shall immediately and fully cooperate with the Village of Milford and EGLE to provide for interim response measures to mitigate injury to public health. If the provision of alternate water supply (such as bottled water) is necessary to mitigate injury to public health, ZF shall immediately provide it to all Village of Milford drinking water customers until such time that other interim response measures are effectively implemented to mitigate the injury to public health. All actions will be evaluated and implemented in close cooperation with the VOM and EGLE.

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Enclosures: Figures and Attachments

Figures

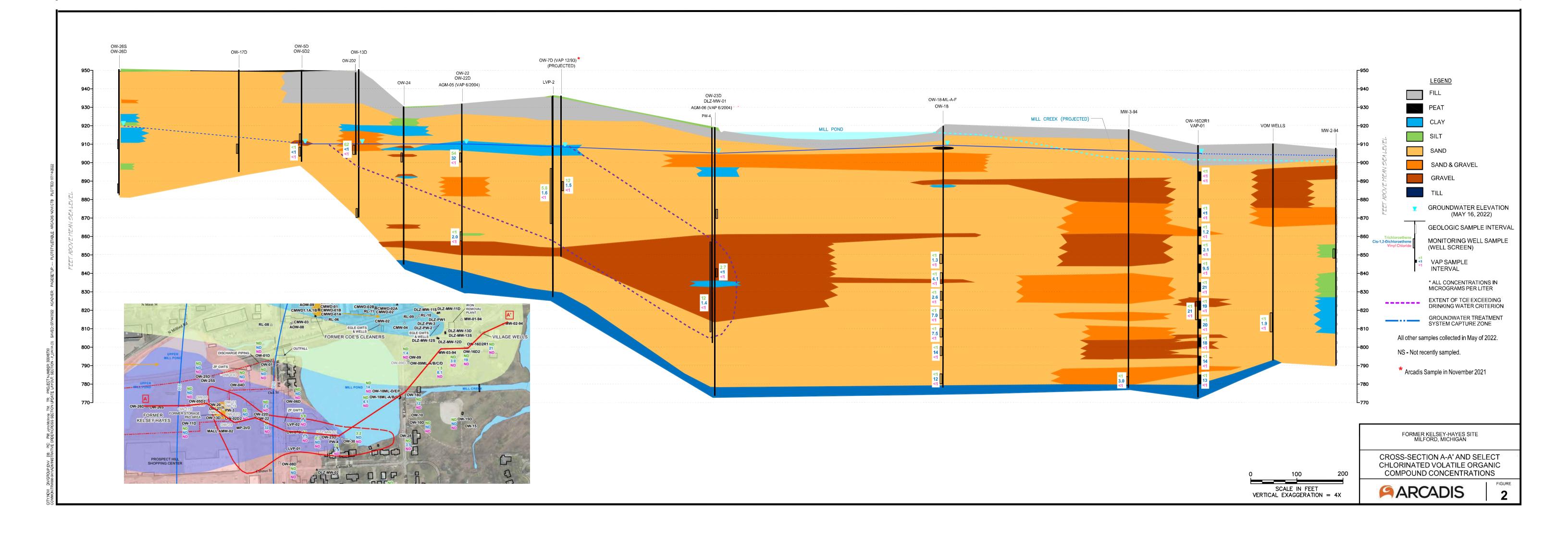
- 1 Site Layout Map
- 2 Cross Section

Attachments

- 1 Trend Graphs Select Observation Wells
- 2 November 23, 2021 ZF Response to EGLE ResAP Request
- 3 Select Laboratory Analytical Results Summary Table OW-16D2
- 4 Summary Tables Laboratory Analytical Results and Field Parameters (OW-16D2) and Upgradient Wells
- 5 April 8, 2022 ZF Letter to EGLE
- 6 Select Laboratory Analytical Results Summary Table (April 2022) OW-16D2
- 7 April 13, 2022 ZF Letter to EGLE
- 8 April 14, EGLE Letter (Response to ZF)
- 9 Progress Report No. 1
- 10 Electronic Mail Confirmation from Mr. Wojciechowski on May 26, 2022
- 11 Laboratory Analytical Reports OW-16D2 since Redevelopment Revised Added Lab Reports
- 12 Well Profile Analysis Report Chemical and Biological (OW-16D2)
- 13 Photographs of OW-16D2 Revised Added a Photograph
- 14 Summary of Results and Laboratory Analytical Reports Vertical Aquifer Profile Borings
- 15 Laboratory Analytical Reports (June through October 2022) Revised Added Lab Reports
- 16 Additional Technical Information (In response to the September 22, 2022 Email from EGLE)

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Figures

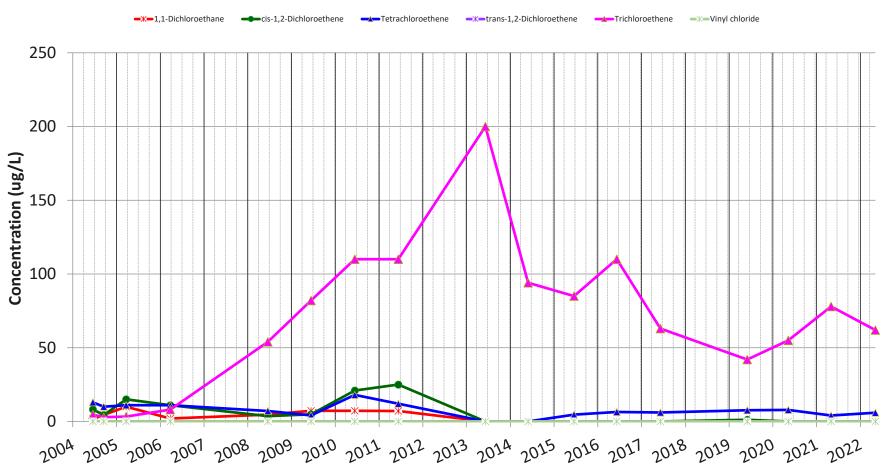


Attachment 1

Trend Graphs – Select Observation Wells

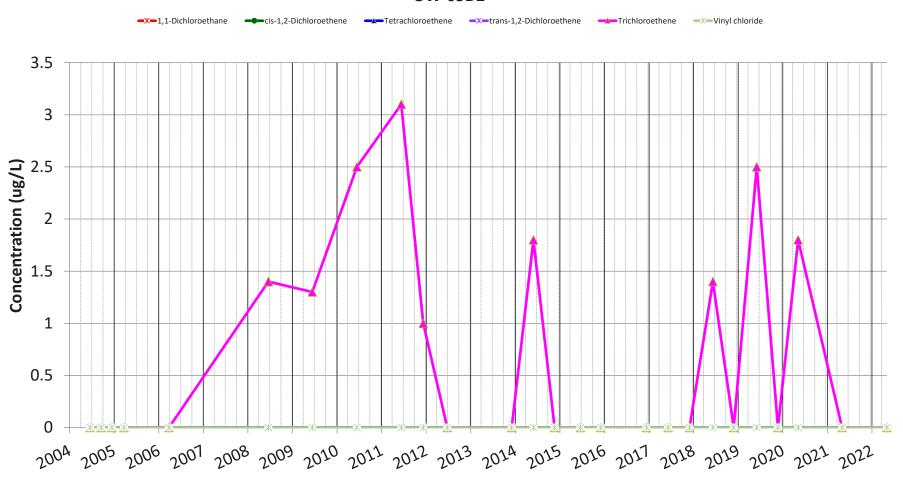






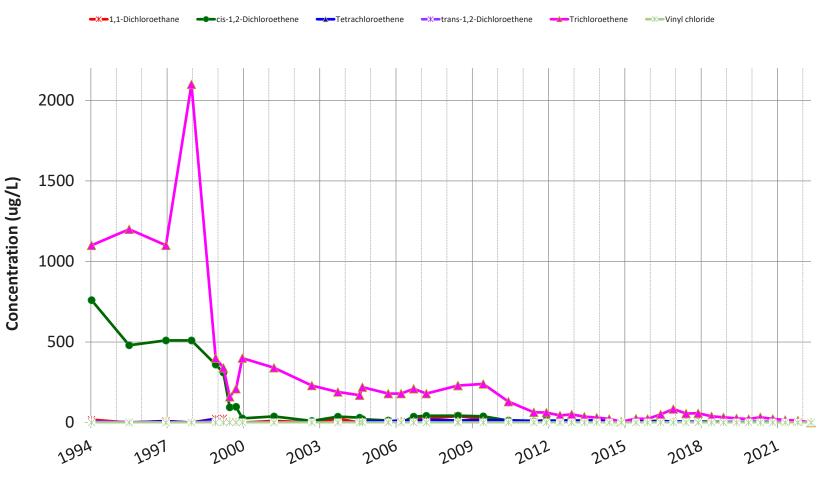


OW-05D2



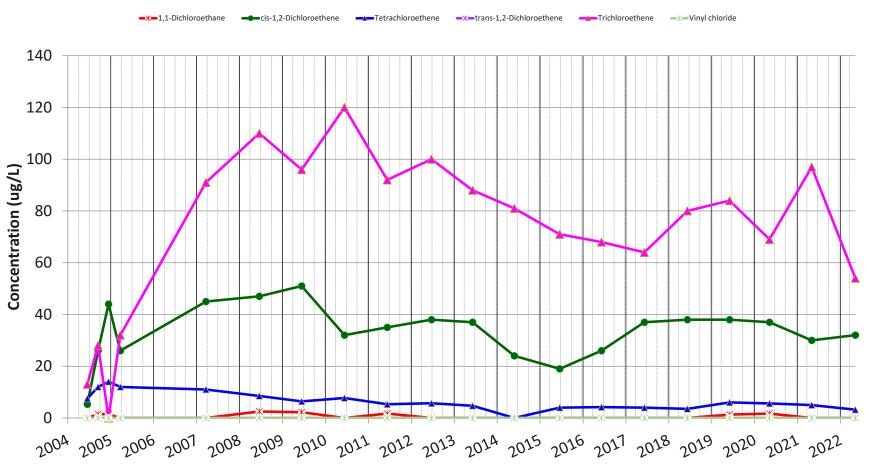






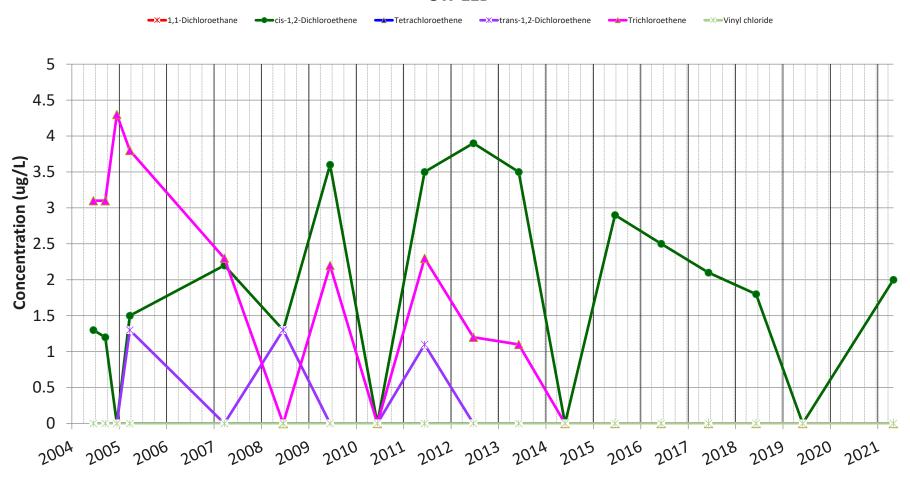






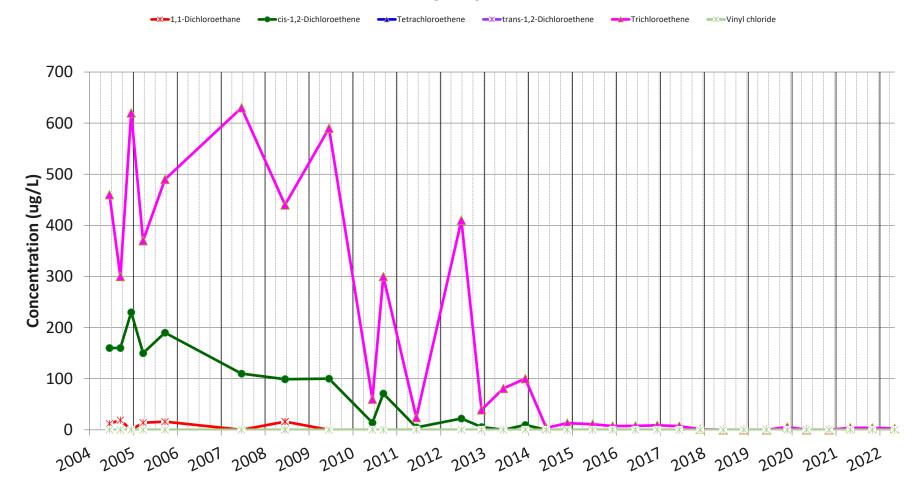






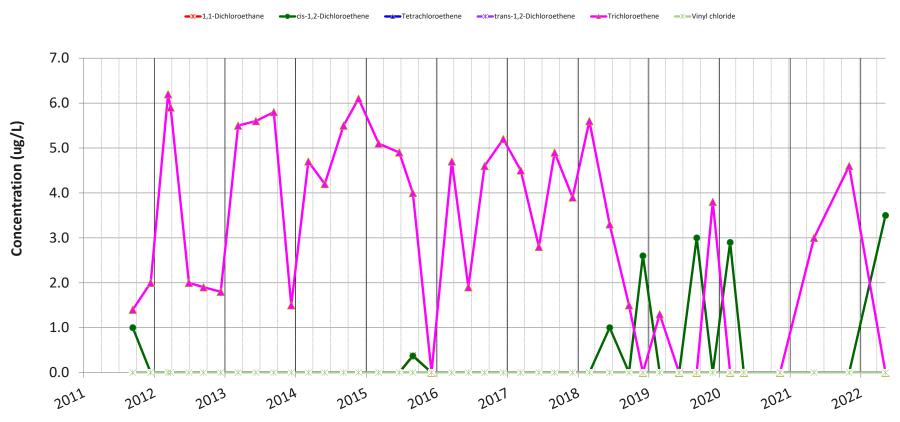






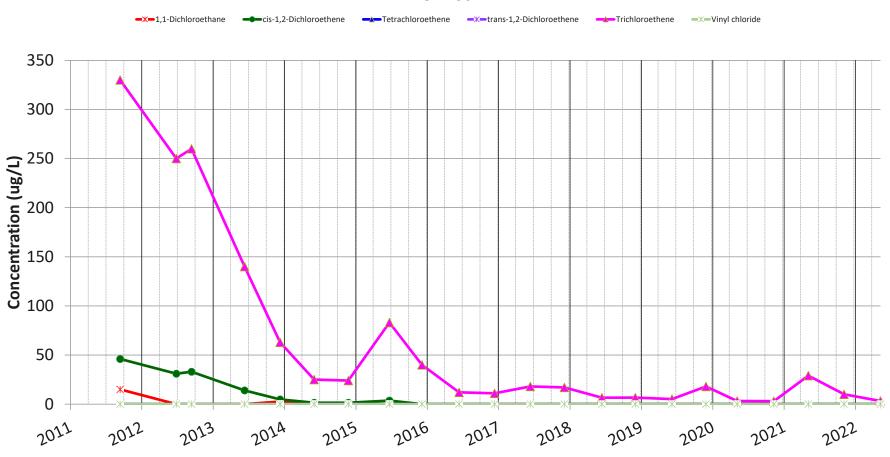












Attachment 2

November 23, 2021 ZF Response to EGLE ResAP Request



ZF Active Safety US Inc. 12001 Tech Center Drive, Livonia, Michigan 48150-2122

VIA EMAIL: WojciechowskiK@Michigan.gov AND CERTIFIED MAIL

Mr. Kevin Wojciechowski, Project Manager Warren District Office -Remediation and Redevelopment Division Michigan Department of Environment, Great Lakes, and Energy 27700 Donald Court Warren, Michigan 48092 Department From

Phone Email Date Health Safety and Environmental

Scott Detwiler +1 480 722-4139 Scott.Detwiler@zf.com November 23, 2021

RE:

ZF Active Safety US Inc. Response to Michigan Department of Environment, Great Lakes, and Energy Compliance Communications Regarding the Facility Located at 101 Oak Street, Milford, Michigan.

EGLE Facility ID No. 63000952

Dear Mr. Wojciechowski:

This letter and the accompanying Response Activity Plan (ResAP) include ZF Active Safety US Inc.'s (ZF's) response to Compliance Communication letters from the Michigan Department of Environment, Great Lakes, and Energy (EGLE), dated September 1, 2021; received by ZF on September 13th (the September 2021 Letter) and dated October 25, 2021; received by ZF on November 9th (the October 2021 Letter). The two Letters state that they are related to the former Kelsey-Hayes property located at 101 Oak Street, Milford, Michigan (the "Facility" or the "Property") for which ZF retains some clean-up responsibility. However, ZF is no longer the owner of the Property.

The primary issue presented by EGLE in both of the Letters is related to groundwater sampling data collected by ZF from an Observation Well (OW-16D2) that exceeded the Part 201 generic drinking water criterion for vinyl chloride. Observation Well OW-16D2 is less than 200 feet from Village of Milford (Milford's) drinking water wells.

The September 2021 Letter requests that ZF submit a ResAP with a schedule, that when implemented, will achieve the cleanup criteria or protect from exposure to the contamination; to demonstrate compliance with Part 201 by 90 days. ZF and its consultant, Arcadis, were in the process of preparing the ResAP within the requested time period, when the October 2021 Letter was received by ZF. The October 2021 Letter requests that ZF initiate the interim response measure of installing treatment on the Milford drinking water system within 14 days of receipt of the October 2021 Letter. Given the two parallel requests from EGLE and the fact that ZF was already in the process of responding to the September 2021 Letter when it received the October 2021 Letter, this response addresses the issues raised in both of the EGLE Letters. The information presented below describes the response activities that ZF has taken at the Facility, including the information provided in the attached ResAP requested by EGLE.

ZF Active Safety US Inc. 12001 Tech Center Drive Livonia, Michigan 48150-2122 USA Phone: +1 734 855-2600 www.zf.com In addition, the information below provides ZF's response to EGLE's request to initiate the interim response measure of installing treatment on the Milford drinking water system.

I. September 2021 Letter and EGLE Request for a ResAP:

As noted above, the September 2021 Letter discusses the presence of vinyl chloride above the Part 201 drinking water criterion in Observation Well OW-16D2, and includes EGLE's request that ZF submit a ResAP with a schedule, that when implemented, will achieve the cleanup criteria or protect from exposure to the contamination. The following response actions have been completed or are ongoing with respect to the Property:

a. Immediately taking measures to contain or remove the contamination source

Numerous response actions have been implemented to address chlorinated volatile organic compound (CVOC) impacts at the Facility and include excavation and removal of impacted soil, installation and operation of a soil vapor extraction (SVE) system, and installation and operation of a groundwater extraction and treatment system (groundwater treatment system). Details of these interim response measures were reported to EGLE in the *Summary of Environmental Response Activities* (Haley and Aldrich of Michigan, LLC 2002) and *Remedial Action Plan* (Arcadis 2009). The combination of these interim responses and the continued operation and performance monitoring of the groundwater treatment system, combined with appropriate land-use restrictions, render relevant exposure pathways incomplete, thereby preventing potential threats to public health, safety, or welfare and to the environment.

b. Immediately identifying and eliminating any threat of fire or explosion or direct contact hazards

There are no threats of fire or explosion, or direct contact hazards associated with the detection of CVOCs at any observation wells sampled as part of the ongoing groundwater monitoring at the Facility. Concentrations of CVOCs detected are several orders of magnitude below the flammability and explosivity screening levels for groundwater. In addition, CVOCs detected in groundwater at Observation Well OW-16D2 are approximately 95 feet below grade. Groundwater concentrations observed at OW-16D2 do not exceed the generic drinking water criteria (except for vinyl chloride which was reported at concentrations of 3.5 and 3.0 ug/L during two sampling events on May 13 and August 3, 2021, and has not been above the drinking water criteria in the last six sampling events since August 3rd) and therefore do not pose unacceptable risks due to direct contact with groundwater. Continued groundwater sampling at this well from August 16 to October 25, 2021 did not indicate the presence of vinyl chloride or any other CVOCs above the generic drinking water criteria.

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c. Notifying EGLE and affected neighbors if contamination has migrated off the property

Impacted parties affected by the migration of property-related impacts from beyond the Facility boundaries have been notified of such migration in accordance with Rule 522(4). Documentation of the notices were reported in the *Remedial Action Plan* (Arcadis January 2009). For properties located along the east side of Cabinet Street between Commerce and Liberty Streets, documentation was provided in *Final Notice of Migration Letters* (Arcadis January 2011). EGLE was previously provided copies of the notices in accordance with the Part 201 notification requirements.

d. Delineating the extent of contamination

The nature and extent of soil and groundwater CVOC impacts related to the former Kelsey-Hayes Property have previously been delineated.

Documentation of the soil delineation is presented in the *Supplemental Soil Delineation Report*, which is Appendix A of the *Remedial Action Plan* (Arcadis January 2009), the *Technical Memorandum Regarding the Remedial Action Plan* (Arcadis January 2010), and the *2010 Site Investigation Activities and Current Site Conditions Report* (Arcadis March 2011).

Groundwater has been investigated at the Property since 1991 through several phases of investigation. A summary of historical groundwater investigations from 1991 to 2001 is presented in the *Summary of Environmental Response Activities* (Haley & Aldrich of Michigan, Inc. 2002) provided to EGLE (formerly MDEQ) on July 24, 2002. Since 2001, additional vertical aquifer profile (VAP) observation well installation and groundwater monitoring events have been performed to further define and verify the extent of groundwater impacts associated with the Facility. This work is documented in the *Groundwater Investigation Summary Report*, which is Appendix D of the *Remedial Action Plan* (Arcadis January 2009), the *Technical Memorandum Regarding the Remedial Action Plan* (Arcadis January 2010), the *June 2010 Investigation at the Intersection of Cabinet and Liberty Streets* (Arcadis August 2010), the *2010 Site Investigation Activities and Current Site Conditions Report* (Arcadis March 2011), and *Interim Groundwater Response Action Activities Summary Reports* (Arcadis 2002-2021), all of which were previously provided to EGLE. The current extent of groundwater impacts above the drinking water criteria and the layout of the groundwater treatment system and groundwater observation wells are presented on Figure 1.

Specific to the Milford municipal well field, groundwater impacts associated with the Site have not been detected south of Liberty Street at concentrations above the generic drinking water criteria, and concentrations trends within the ZF monitoring network are indicative of stable/decreasing trends and an absence of vinyl chloride. The conceptual site model (CSM) informed by multiple lines of evidence indicates a stable plume that is being effectively remediated by ongoing pumping and is therefore not a risk to impact the municipal wells. In addition, as presented in the *Groundwater Flow Model Update and Hydraulic Capture Evaluation* (Arcadis August 2014), and presented on Figure 1, OW-16D2 and the municipal wells are not within the flow path of groundwater emanating from the Facility.

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e. Undertaking the cleanup of contamination

As indicated above, numerous response actions have been implemented to address CVOC impacts at the Site and include excavation and removal of impacted soil, installation and operation of a SVE system, and installation and operation, and later enhancement of a groundwater treatment system. The treatment system enhancement work is documented in the *Groundwater Treatment System Optimization Work Plan* (Arcadis August 2011).

As presented in the *Remedial Action Plan* (Arcadis January 2009) all sources of CVOCs (tanks, drums, other containers, and secondary containment structures, as well as grossly impacted soils and foundation materials) have been physically removed from the Site as part of the building decommissioning and demolition, subsequent "hot spot" excavations of impacted subsurface soils have been conducted, and a SVE interim response has been implemented.

Current and historical groundwater monitoring data indicate that the current groundwater treatment system, which has been in operation since 1999, is effectively intercepting impacted groundwater associated with the Site and mitigating further migration of Property-related groundwater impacts above the drinking water criteria. In addition, as presented in the *Groundwater Flow Model Update and Hydraulic Capture Evaluation* (Arcadis August 2014) the Property groundwater treatment system extraction wells are providing adequate hydraulic capture of the Property-related CVOC plume.

f. Observation Well OW-16D2 Sampling

As presented above and demonstrated in the *Groundwater Flow Model Update and Hydraulic Capture Evaluation* (Arcadis August 2014), it's our position that OW-16D2 is not within the flow path of groundwater emanating from the Property. However, at the request of EGLE, ZF, recognizing that Observation Well OW-16D2 was included in the expansive and conservative well network originally developed by ZF, Arcadis/ZF submitted a sampling plan for OW-16D2 to EGLE on August 3, 2021 and October 7, 2021 via email, which was approved by you on October 13, 2021 via email (see Attachment 1). Pursuant to this plan, ZF sampled OW-16D2 bi-weekly until October 25, 2021. The concentrations of vinyl chloride in the last six sampling events conducted on August 16, September 1, September 13, September 27, October 11, and October 25, 2021 were below the generic drinking water criterion. Therefore, the sampling frequency will be monthly for November 2021, December 2021, and January 2022. If the concentration of vinyl chloride remains at or below the generic drinking water criterion during these three, monthly sampling events, the sampling frequency will return to the semiannual sampling schedule per the groundwater monitoring plan. If the generic drinking water criterion for vinyl chloride is exceeded during any of the remaining sampling events, the sampling frequency will be bi-weekly through January 2022.

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g. Due Care

ZF is not the owner of the Property and therefore, is not responsible for complying with the due care provisions under Section 20107a of Part 201 that are applicable to the Property.

11. October 2021 Letter and EGLE Request for Interim Response Measure to Install Treatment:

The October 2021 Letter reiterates that vinyl chloride was detected in OW-16D2 above the generic drinking water criteria and states that, "the concentration of vinyl chloride found at the Property (i.e. Facility) and the proximity to the Village of Milford municipal well field makes this an imminent and substantial endangerment to public health, safety and welfare, and steps are required to abate that danger in accordance with Section 20119." The October 2021 Letter then requests that ZF initiate the interim response measure of installing treatment on the Milford drinking water system.

ZF disagrees that there is an imminent and substantial endangerment to public health, safety, and welfare that is being caused by the chlorinated solvent plume from the former Kelsey-Hayes Property. The information presented below, includes historical and current data collected by both ZF and other parties, that supports this conclusion.

The following information previously submitted by ZF to EGLE¹ supports ZF's contention that CVOC's from the former Kelsey-Hayes Property are not an imminent and substantial endangerment to public health, safety and welfare, including:

- Vinyl chloride detections in groundwater at the Property were limited to the former storage pad area (see Figure 1) in investigations conducted between 1999 and 2011, with no vinyl chloride detected recently in any wells monitored by ZF.
- Vinyl chloride previously detected in groundwater wells between 1999 and 2011 within the former storage pad area is located upgradient of and entirely within the capture zones of ZF's active groundwater extraction wells. This groundwater treatment system has been in operation since 1999 and has been providing continuous hydraulic capture of groundwater impacts associated with the Facility.
- ZF has completed delineation of groundwater impacts associated with the Facility. None of the observation wells hydraulically downgradient of the facility at Liberty Street exceed the drinking water criteria.

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¹ This information has previously been provided to EGLE in the following reports: 1) Remedial Action Plan (Arcadis January 2009); 2) 2010 Site Investigation Activities and Current Site Conditions Report (Arcadis March 2011).

- ZF has implemented multiple aggressive remedial actions including, source area excavations, soil
 vapor extraction (SVE), and a groundwater extraction and treatment system at the Facility. These
 remedies have been executed and completed during the past 25 years and the groundwater
 extraction and treatment system is continuing.
- ZF expanded the groundwater extraction and treatment system by installing PW-4 to specifically target groundwater impacts that were beyond the hydraulic influence of the Commerce Road ZF extraction wells.
- Results from numeric groundwater modeling completed by Arcadis, and shown on Figure 1,
 clearly shows that the groundwater extraction and treatment system completely captures the
 impacts from the Facility and shows the location of the ZF plume outside the hydraulic capture of
 the Milford municipal wells.

ZF has been collecting samples from OW-16D2 since 1998 and vinyl chloride has not been detected above the generic drinking water criteria in any samples collected until recently, in May 2021 and August 2021. The concentrations of vinyl chloride detected at OW-16D2 during the last six sampling events conducted between August 16th and October 25th, 2021 were all below the generic drinking water criteria for vinyl chloride.

Date	Vinyl Chloride (ug/L)	Drinking Water Criteria (ug/L)
May 13	3.5	2.0
June 8	1.2	2.0
August 3	3.0	2.0
August 16	1.8	2.0
September 1	1.7	2.0
September 13	1.6	2.0
September 27	1.8	2.0
October 11	1.4	2.0
October 25	1.5	2.0

Based on a several summaries of the data for the Milford municipal well system that have been provided to ZF and Arcadis, vinyl chloride has never been detected in Milford's municipal wells or associated distribution systems during the last 32 years. Therefore, based on the information that ZF has, it does not appear that there is an imminent and substantial endangerment to public health, safety and welfare and the installation of a treatment system on the Village of Milford drinking water system is not necessary.

In addition, there is no basis to conclude vinyl chloride at the levels detected in OW-16D2 will result in vinyl chloride being detected above drinking water criteria in Milford's municipal wells or its municipal water system.

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In sharp contrast to OW-16D2, the Milford municipal wells have screens 20 feet long with an average pumping rate of 470 gallons per minute (gpm) and draw water from a large area, including to the east and south (i.e., the opposite direction of OW-16D2). Because the municipal wells draw groundwater from such a large area, even if vinyl chloride were to migrate from OW-16D2 to the municipal wells (which there is no evidence of) it would not cause an exceedance of the generic drinking water criteria in the municipal water.

Finally, ZF disputes EGLE's assertion that the source of the vinyl chloride found in OW-16D2 is from the former Kelsey-Hayes Property. Observation well OW-16D2 and the Milford municipal wells are not within the flow path of groundwater emanating from the Property. There are multiple other confirmed sources of CVOC contamination near and upgradient of OW-16D2, which include vinyl chloride as a contaminant, and several known CVOC plumes in the Village of Milford. The other known sources include the former Spiral Industries site and the Coe's Cleaners site, discussed further below. See attached **Figure 1**, which shows the known source areas and the municipal well capture zone within the Village of Milford. The Spiral Industries site and the Coe's Cleaner site are upgradient of and directly in the groundwater flow path of OW-16D2 and the Milford municipal wells. Based on the probability that other sites may be the source of the vinyl chloride found in OW-16D2, and the multiple lines of evidence that ZF has that the Property is not the source of vinyl chloride impacts in OW-16D2, ZF contends that there is no conclusive evidence regarding the source of the vinyl chloride in OW-16D2. Therefore, ZF disputes EGLE's presumption that the former Kelsey-Hayes Property is the source.

a. Former Spiral Industries - 140 and 150 West Summit Street

The former Spiral Industries site is located north of the Milford municipal wells. Based on a Baseline Environmental Assessment (BEA) submitted to EGLE in June 2014, concentrations of CVOCs detected at the former Spiral Industries site include, but are not limited to: vinyl chloride (Soil: 709 ug/kg and Groundwater: 280 ug/l), trichloroethene (Soil: 2,620,000 ug/kg and Groundwater: 153 ug/l), and cis-1,2 dichloroethene (Soil: 215,000 ug/kg and Groundwater: 650 ug/l). The concentrations of vinyl chloride at Spiral Industries are more than two times higher than any vinyl chloride concentrations ever detected at the former Kelsey-Hayes Property. Unlike the Property, the former Spiral Industries site is directly upgradient of and within proximity to the Milford municipal well capture zone. EGLE should be aware of this information based on EGLE's acknowledgement of receipt of the BEA.

Furthermore, the BEA for the Spiral Industries site indicates that:

- The property is a "Facility" as defined by Part 201.
- The source, nature and extent of contamination at the property is not fully delineated.
- Soil and groundwater contamination at the site, including with vinyl chloride and other CVOCs, is within the Village of Milford and directly upgradient of the Milford municipal wells.
- To ZF's knowledge this site has not yet implemented response actions and therefore, represents an unmitigated risk to the Village of Milford municipal wells.

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b. Former Coe's Cleaners site - West of Main Street just north of Center Street

As for the Coe's Cleaners site, EGLE has also long been aware of and directly overseeing the ongoing investigation and cleanup of CVOCs emanating from this site. The groundwater monitoring wells associated with this site are located immediately upgradient of and within the Milford municipal well capture zone, as determined by the model results and shown on Figure 1. The concentrations of tetrachloroethene detected in soil samples collected at the former Coe's Cleaner site during an August 2007 investigation performed by Weston Solutions, Inc., ranged from 51 ug/kg to 22,000 ug/kg. There has been no source area removal or remediation performed at the Coe's Cleaner site.

III. Conclusion:

As detailed above and previously presented in various reports to EGLE, ZF has performed extensive response actions including site investigations and remediation at the Property and surrounding area for many years. These actions have achieved consistent compliance with Part 201 requirements. ZF continues to perform ongoing response actions associated with the Property, such as operating an active groundwater pumping remedy and completing groundwater monitoring. These remedies continue to be effective at removing CVOC mass from the aquifer and preventing the migration of contaminants from the Property. During the past 30 years, ZF has implemented response activities to achieve cleanup criteria or protect from exposure to the contamination at the Property and continues to do so.

Furthermore, based on the information presented in this letter, ZF disputes EGLE's assertion that there is an imminent and substantial endangerment to public health, safety, and welfare that is being caused by the chlorinated solvent plume from the Property. Based on the multiple lines of evidence that ZF has presented in this response, there is no conclusive evidence regarding the source of the vinyl chloride in OW-16D2 and ZF disagrees with EGLE's presumption that the former Kelsey-Hayes Property is the source. ZF does not have any information indicating that the Village of Milford drinking water system has been or could imminently be impacted with vinyl chloride. Therefore, it does not appear that there is an imminent and substantial endangerment to public health, safety and welfare and the installation of a treatment system on the Village of Milford drinking water system is not necessary and is not ZF's responsibility.

In light of the extensive response actions already undertaken by ZF, the complex history of CVOC contamination in the Village of Milford, and EGLE's request that ZF initiate plans to install treatment on the Milford municipal wells, ZF believes a technical meeting with EGLE would be a productive next step. Arcadis and ZF have made multiple attempts to schedule such a meeting with EGLE, most recently by calling you on November 9th. ZF would appreciate hearing from you regarding some dates and times that EGLE would be available to schedule a technical meeting. Please contact me at your earliest convenience.

ZF Active Safety US Inc. 12001 Tech Center Drive Livonia, Michigan 48150-2122 USA

Phone: +1 734 855-2600

Sincerely,

ZF Active Safety US Inc.

Scott D. Detwiler Regional EHS Manager

ZF Health Safety and Environmental

Cc: John McInnis, Arcadis

Robert Bleazard, ZF Group Kelly M. Martorano, ZF Group

Attachments: Attachment 1 - Email Correspondence with K. Wojciechowski

Figure 1 - Municipal Well Capture Zone and Known CVOC Sources

USA

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Attachment 1

McInnis, John

From: Wojciechowski, Kevin (EGLE) <WojciechowskiK@michigan.gov>

Sent: Wednesday, October 13, 2021 12:49 PM

To: McInnis, John

Cc: Detwiler Scott MSA HEEN; Christian Wuerth; Owens, Paul (EGLE); Wilson, Cheryl (EGLE);

Dewyre, Robin (robin.dewyre@amecfw.com); Mark Sweatman; Christian Wuerth; Mike

Karl

Subject: RE: Monitoring Well 16D2 Sampling

John,

Continue to monitor OW-16D2 as scheduled below.

Thanks,

Kevin Wojciechowski

Senior Environmental Quality Analyst
Michigan Department of Environment, Great Lakes, and Energy
Remediation Redevelopment Division
Warren District Office

Cell: 586-623-2948

wojciechowskik@michigan.gov

Pollution Emergency Alerting System: 1-800-292-4706

From: McInnis, John < John. McInnis@arcadis.com>

Sent: Thursday, October 7, 2021 9:53 AM

To: Wojciechowski, Kevin (EGLE) < WojciechowskiK@michigan.gov>

Cc: Detwiler Scott MSA HEEN <scott.detwiler@zf.com>; Christian Wuerth <cwuerth@villageofmilford.org>; Owens, Paul

(EGLE) <OWENSP@michigan.gov>; Wilson, Cheryl (EGLE) <WILSONC3@michigan.gov>; Dewyre, Robin

(robin.dewyre@amecfw.com) < robin.dewyre@amecfw.com>; Mark Sweatman < mark.sweatman@woodplc.com>;

Christian Wuerth <cwuerth@villageofmilford.org>; Mike Karll <mkarll@villageofmilford.org>

Subject: RE: Monitoring Well 16D2 Sampling

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Good morning Kevin,

Currently, we are operating in accordance with the Observation Well 16D2 sampling plan submitted to EGLE on August 3, 2021 via email. Sampling of Observation Well OW16D2 will continue bi-weekly, at a minimum, until October 25, 2021. The concentrations of vinyl chloride in the last three sampling events conducted on 8/16/21, 9/1/21, and 9/13/21 were below the drinking water criterion (DWC). If concentrations of vinyl chloride remain at or below the DWC for the next three sampling events (9/27/21, 10/11/21, and 10/25/21), the sampling frequency will change to monthly for the following three months (November 2021, December 2021, and January 2022). If the concentration of vinyl chloride remains at or below the DWC during these three months, the sampling frequency will return to the semiannual sampling schedule per the groundwater monitoring plan. If the DWC for vinyl chloride is exceeded during any of the remaining

sampling events, the sampling frequency will remain at bi-weekly during the months of November 2021, December 2021, and January 2022.

Regarding the request for a Response Activity Plan (ResAP), we are reviewing site information and are planning to provide the ResAP in accordance with the 90-day schedule mentioned in the Compliance Communication, dated September 1, 2021.

I was able to track down a copy of the 1998 Techna Interim Response Work Plan if you still need it.

Please let me know if you have any questions.

Thanks, John

From: Wojciechowski, Kevin (EGLE) < WojciechowskiK@michigan.gov >

Sent: Wednesday, October 6, 2021 12:31 PM **To:** McInnis, John < <u>John.McInnis@arcadis.com</u>>

Cc: Detwiler Scott MSA HEEN <scott.detwiler@zf.com>; Christian Wuerth <cwuerth@villageofmilford.org>; Owens, Paul

(EGLE) < owensp@michigan.gov >; Wilson, Cheryl (EGLE) < WILSONC3@michigan.gov >; Dewyre, Robin

(robin.dewyre@amecfw.com; Mark Sweatman mark.sweatman@woodplc.com;

Christian Wuerth < cwuerth@villageofmilford.org>; Mike Karll < mkarll@villageofmilford.org>

Subject: RE: Monitoring Well 16D2 Sampling

Good afternoon John,

What is ZF Corps plans for sampling OW-16D2 after the last October monitoring event? How are things progressing on the Response Active Plan for the groundwater? Now that we have received more data from the wells in the park the hit of vinyl chloride is not going away. Wood has found some old data from when these wells were installed, EGLE is going to be looking for the actual report from the 1990's because Wood doesn't have the complete report. This data is the vertical aquifer profiling that was done when the wells were installed. We can have a meeting once EGLE can track down that report.

Mark, what was the title and date of that vertical aguifer sampling report?

Thanks,

Kevin Wojciechowski

Senior Environmental Quality Analyst
Michigan Department of Environment, Great Lakes, and Energy
Remediation Redevelopment Division
Warren District Office

Cell: 586-623-2948

wojciechowskik@michigan.gov

Pollution Emergency Alerting System: 1-800-292-4706

From: Samp, Marina < <u>Marina.Samp@arcadis.com</u>>

Sent: Thursday, August 5, 2021 1:46 PM

To: Mike Karll <mkarll@villageofmilford.org>; Wojciechowski, Kevin (EGLE) <WojciechowskiK@michigan.gov>

Cc: Detwiler Scott MSA HEEN <scott.detwiler@zf.com>; Christian Wuerth <cwuerth@villageofmilford.org>; McInnis,

John < John. McInnis@arcadis.com>

Subject: RE: Monitoring Well 16D2 Sampling

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Hi Kevin and Mike,

A tentative schedule for the next couple months is outlined below. Field staff have reviewed and indicated this will work with their schedules so I do not anticipate too many, if any, changes at this time. Contact info for field staff is listed below in the event it is needed.

- Monday, August 16th at 9:30 AM (Stacey Hannula/Emma Witherspoon)
- Wednesday, September 1st at 9:30 AM (Stacey Hannula/Allyson Hartz)
- Monday, September 13th at 9:30 AM (Allyson Hartz)
- Monday, September 27th at 9:30 AM (Allyson Hartz)
- Monday, October 11th at 9:30 AM (Stacey Hannula)
- Monday, October 25th at 9:30 AM (Stacey Hannula)

Allyson Hartz: 313-401-7398 Stacey Hannula: 517-203-8600

Please let John or myself know if there are any questions or concerns with this schedule.

Thanks!

From: McInnis, John < John.McInnis@arcadis.com >

Sent: Thursday, August 5, 2021 9:50 AM

To: Mike Karll <mkarll@villageofmilford.org>; Wojciechowski, Kevin (EGLE) <WojciechowskiK@michigan.gov>

Cc: Detwiler Scott MSA HEEN < scott.detwiler@zf.com >; Samp, Marina < Marina.Samp@arcadis.com >; Christian Wuerth

<cwuerth@villageofmilford.org>

Subject: RE: Monitoring Well 16D2 Sampling

Thanks Mike,

Marina has been working on a tentative schedule for the sampling of Monitoring Well 16D2 and will pass it around to the group.

Thanks, John

From: Mike Karll < mkarll@villageofmilford.org >

Sent: Wednesday, August 4, 2021 4:36 PM

To: McInnis, John < John.McInnis@arcadis.com >; Wojciechowski, Kevin (EGLE) < WojciechowskiK@michigan.gov >

Cc: Detwiler Scott MSA HEEN <scott.detwiler@zf.com>; Samp, Marina <Marina.Samp@arcadis.com>; Christian Wuerth

<cwuerth@villageofmilford.org>

Subject: RE: Monitoring Well 16D2 Sampling

Good afternoon John,

That should not be an issue. We do have Milford Memories the weekend prior but cleanup should be wrapping up by then. Could you please provide a tentative schedule for the future sampling events for the next couple of months?

Thank you,

Mike Karll
Director of Public Services
Village of Milford

Office: 248-685-3055 Cell: 248-396-2315 Fax: 248-684-3465

From: McInnis, John

Sent: Wednesday, August 4, 2021 3:30 PM
To: Wojciechowski, Kevin (EGLE); Mike Karll
Cc: Detwiler Scott MSA HEEN; Samp, Marina
Subject: Monitoring Well 16D2 Sampling

Hi Kevin and Mike,

Any conflicts with conducting the next sampling event of Monitoring Well 16D2 on August 16, 2021 around 9 AM?

Thanks, John

John McInnis PE Senior Engineer/Project Manager Arcadis of Michigan, LLC 28550 Cabot Drive Suite 500 | Novi, MI | 48377 | USA T +1 248 994 2285 M +1 248 982 9674 www.arcadis.com











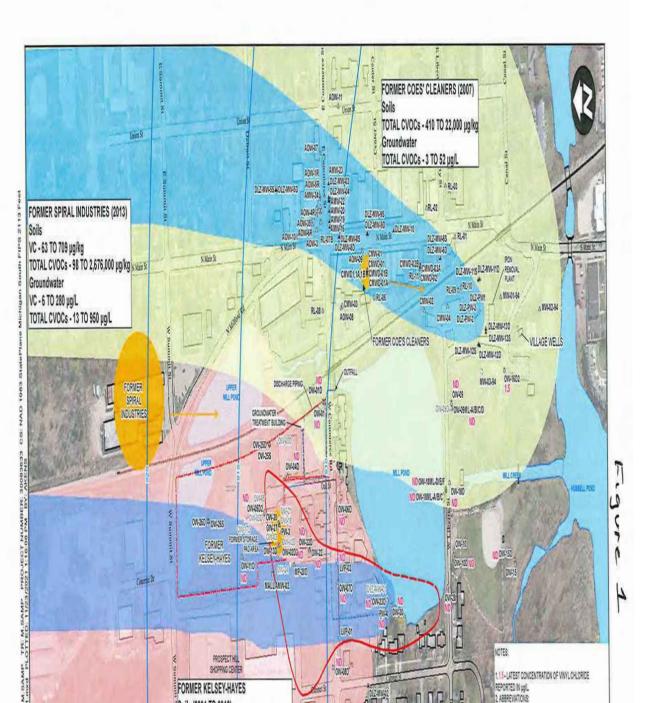
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MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY REMEDIATION AND REDEVELOPMENT DIVISION PO BOX 30426, LANSING, MICHIGAN 48909-7926

Request for EGLE Review of Response Activity Plan

This form is required for submittal of a request for EGLE to review a Response Activity Plan, under Section 20114b, Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended.

Section A: Type of	f Response A	Activity Plan bei	ng Submitted (Ch	neck all that apply):	
Remedial Investi	gation			20b(2)Site Specific Criteria	
Evaluation Plan			\boxtimes	(modification of generic criteria)	
Feasibility Study				20b(3) Site Specific Criteria or Surrogate	
Remedial Action				(no generic criteria available)	_
Interim Response	e Plan			Section 20118(4) and (5) Request	
Mixing Zone Rec			П	Land or Resource Use Restrictions	
20e(14) De Minir		pact	ī	Other, Specify:	
,			_	, - y	_
The Response A	s defined by Activity Plan the release(s	Part 201, all re does not addr s), hazardous s	leases, hazardo ress the entire fa ubstance(s), env	us substances, and environmental media) cility: vironmental media, and/or portions of the facility oride at Observation Well OW-16D2.	ly addressed by
Section B: Facili			ck all that apply):		N
Facility regulated Part 201 Facility					\boxtimes
	•				
Leaking Undergr			ed pursuant to F	Part 213	
Part 211/213. Fa	<u>acility ID, if k</u>	<u>known</u> :			Ш
Oil or gas produc	ction and de	velopment reau	ulated pursuant t	o Part 615 or 625	
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Licensed landfill	regulated pt	ursuant to Part	115		
Licensed hazard	ous waste tr	reatment, stora	ge, or disposal fa	acility regulated pursuant to Part 111	
Consent Agreem	ent or other	legal agreeme	nt with FGLE		
- Consent rigiteen		legal agreeme	THE WIGH EOLE		
eatian C. Easiliti					
Section C: Facility					
Facility Name: Fo	ormer Keisey	/-Hayes Plant F	Property	County: Oakland	
Ctroot Address of	f Dranartu 1	01 Oak Street		City/Village/Township: Milford Town: T 2N Range: R 7 E Section	. 40
Street Address of	Property. 1	UT Oak Street			10
City: Milford	State: Mie	higan 7in:	48381	Quarter: NE Quarter-Quarter: NE	
City: Milford	State: Micl	nigan zip.	40301	Dogimal Dograda Latituda: 42 502101	
Property Tax ID (includo all a	nnlicable IDs):	16 10 227 018	Decimal Degrees Latitude: 42.593101 Decimal Degrees Longitude: -83.602459	
Troperty rax ib (iliciuue ali a	pplicable 103).	10-10-227-010	Decimal Degrees Longitude: -03.002439	
0.1 ()				Reference point for latitude and longitude:	_
Status of submitte	er relative to	tne property (c	check all that	Center of site Main/front door	<u>-</u> -
apply):				Front gate/main entrance	
- P P . J / .					
	Former	Current	Prospostivo	Collection method:	ļ
	Former	Current	Prospective	Collection method:	_
Owner	Former	Current	Prospective	Collection method: Survey ☐ GPS ☒ Interpolation	n 🗆

Section D: Submitter Information:

EGLE Environmental Assistance Center Phone: 800-662-9278

Entity/person requesting review: ZF Active Safety US Inc.			
Contact Person (name and title): Scott Detwiler			
Submitter Address: 12025 Tech Center Drive			
City: Livonia	State: Michigan	Zip: 48150	
Telephone: 480-722-4139	E-Mail: scott.detwiler	@zf.com	
Relationship of contact person to the submitter: Same	C		
Owner Name, if different from submitter: Village of Milford	Company:		
Address: 1100 Atlantic Street City: Milford	State: Michigan	Zip: 48381	
Telephone: 248-684-1515	E-Mail: info@villaged	•	
Telephone. 240-004-1010	L-Iviali. IIIIO@villagec	on miliora.org	
Section E: Are/were the following present at the facility (Check all the	nat apply):		
		Current Previous Unkno	wn
Mobile or Migrating Non-Aqueous Phase Liquids (NAPL)			ļ
Soil contamination above any residential criteria Soil contamination above any non-residential criteria			<u> </u>
Soil aesthetic impacts			<u> </u>
Groundwater contamination above any residential criteria			j
Groundwater contamination above any non-residential cri	teria]
Groundwater aesthetic impacts	0.40 ·]
Soil Gas contamination above residential vapor intrusion		님 님 님] i
Soil Gas contamination above non-residential VI screenin Conditions immediately dangerous to life or health (IDLH)		님 님 님]]
Fire & Explosion hazards related to releases			!]
Contamination existing in drinking water supply			j
Imminent threat to drinking water supply			ĺ
Impact to Surface Water]
Surface Water Sediments above screening levels			
Section F: The following questions assist EGLE in evaluating this rec	quest.		
Known or Suspected Contaminant(s) Type (Check all that appl			
Petroleum 🔲 Volatile Organic Compounds 🛛	Metals	Other	
Current Site Status (Check all that apply):			
Undergoing property transfer Active operations	☐ Inactive o	peration 🛚	
Current Property Use:			
Residential			
Non-residential			
Anticipated Property Use:			
Residential New providential Manuacidential			
Non-residential 🛛			
Estimated Area of Contamination Addressed in Response Acti	on Plan (Cumulative	e):	
Currently undetermined	0.5 acre 🛚		
Migration:			
	Yes	No Unknown	
Has contamination migrated beyond the property boundaries?	\boxtimes		
Has the Notice of Migration been submitted?	\boxtimes		
Facility Investigation Status:			
Ongoing Complete			
Facility Response Activity Status (Check all that apply):			
None ☐ IR Implemented ☒ Response Activity O	ngoing Respo	onse Activity Completed	
Drinking Water Supply for Facility (Check all that apply):	· - ·	<u> </u>	-
Municipal Private Well(s) No Current W	/ater Supply ⊠	Municipal Available	
	arer audony IVI	IVIUI IICIDAI AVAIIADIE A	- 1

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On-site Well(s) (Check all that apply):		
	nercial Production ite Contains Observ	☐ Agricultural/Irrigation ☐ No well on-site ☐ vation Wells Only
Local Drinking Water Supply:		
Is facility in a designated Wellhead Pro Distance to nearest off-site drinking wa		Yes ⊠ No □ t Private □ Municipal ⊠
Surface Water Bodies on or Adjacent to Fac	ility (Check all tha	t apply):
Wetlands ☐ Ditch ☐ Str	eam/River 🏻	Lake/Pond 🛛
Local Surface Water Bodies:		
Distance to nearest wetland: (Downgradient of Site)	Ditch:	Stream/River: Lake/Pond: Approx. 550 Feet
Have other plans been submitted for this fac	•	
Facility Name, if different than this subr Date and Name of most recent submitt Action Plan – 1/11/2010		Plan-1/30/2009 and Tech Memo Regarding Remedial
Section G: Environmental Professional Signatu	re:	
		erials are true, accurate, and complete to the best of my Date: 11/23/2021
Printed Name: Troy Sclafani		Bato. 11/20/2021
Company of Environmental Professional: Arcad	dis	
Address: 28550 Cabot Drive, Suite 500		
City: Novi	Sta	ite: Michigan Zip: 48377
Telephone: 248-994-2288		nail address: Troy.Sclafani@arcadis.com
Section H: Submitter Signature:		
		erials are true, accurate, and complete to the best of my bmitter.
Signature: Left Of St	Da	ate: 11/23/2021
Printed name: Scott Detwiler		
Title/Relationship of signatory to submitter: Reg	gional EHS Manage	r/ZF Active Safety US Inc.
Address: 12025 Tech Center Drive		
City: Livonia	State: Michigan	Zip: 48150
Telephone: 480-722-4139		E-Mail address: scott.detwiler@zf.com

This form and the Response Activity Plan should be submitted to EGLE Remediation & Redevelopment Division District Office for the county in which the property is located, unless the response activity is related to a facility that is regulated by another EGLE Division. A district map is located at www.michigan.gov/EGLErrd. If regulated by another division, contact should be made with that division for information on where to submit the form and plan.

For information or assistance on this publication, please contact the (program), through EGLE Environmental Assistance Center at 800-662-9278. This publication is available in alternative formats upon request.

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This form and its contents are subject to the Freedom of Information Act and may be released to the public.

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Attachment 3

Select Laboratory Analytical Results Summary Table – OW-16D2

Attachment 3 OW-16D2 Groundwater Analytical Results August 3 through February 17, 2022



Sample Identification:					Obse	ervation \	Well OW-	16D2					Residential
Sample Collection Date:	8/3/2021	8/16/2021	9/1/2021	9/13/2021	9/27/2021	10/11/2021	10/25/2021	11/8/2021	12/6/2021	1/4/2022	1/25/2022	2/17/2022	Drinking Water Criteria
Tetrachloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5.0 (A)
Trichloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5.0 (A)
cis-1,2-Dichloroethene	16	13	16	20	18	12	17	17	8.2	15	15	12	70 (A)
trans-1,2-Dichloroethene	1.6	1.1	1.3	1.7	1.7	1.1	1.6	1.5	<1.0	1.6	1.4	1.1	100 (A)
1,1-Dichloroethane	3.8	3.0	3.2	3.9	3.7	2.8	3.8	4.2	2.0	3.0	3.4	3.1	880
Vinyl chloride	3.0	1.8	1.7	1.6	1.8	1.4	1.5	1.5	<1.0	2.5	3.2	2.0	2.0 (A)

Notes:

All concentrations are in micrograms per liter (µg/L).

Attachment 4

Summary Tables - Laboratory Analytical Results and Field Parameters (OW-16D2) and Upgradient Wells



Sample Identification:	Residential Drinking	Groundwater Surface Water								Ob	servation	Well OW	-16D2								
Sample Collection Date:	Water Criteria	Interface Criteria	6/15/2010	12/17/2010	6/15/2011	12/14/2011	6/29/2012	12/12/2012	6/12/2013	12/11/2013	6/15/2014	11/24/2014	6/24/2015	12/9/2015	6/14/2016	12/13/2016	12/6/2017	6/12/2018	12/4/2018	6/10/2019	12/3/2019
Tetrachloroethene	5.0 (A)	60 (X)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	5.0 (A)	200 (X)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	70 (A)	620	2.4	3.2	2.1	<1.0	1.4	12	<1.0	3.4	<1.0	22	<1.0	19	<1.0	1.7	18	<1.0	4.1	1.2	1.1
trans-1,2-Dichloroethene	100 (A)	1,500 (X)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.3	<1.0	1.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	880	740	<1.0	<1.0	1.1	<1.0	<1.0	2.1	<1.0	<1.0	<1.0	3.0	<1.0	2.3	<1.0	<1.0	1.9	<1.0	2.1	1.6	1.4
Vinyl chloride	2.0 (A)	13 (X)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Field Parameters																					
Drawdown (feet)			-0.3	2.8	0.0	1.5	0.0	0.0	0.0	0.0	0.0	1.3	0.4	5.1	4.7	12.2	8.4	4.6	5.5	8.5	3.5
pH (standard units)			7.36	7.74	7.82	7.44	7.60	7.57	7.90	7.85	7.17	7.79	7.82	7.56	7.62	7.91	8.05	7.67	7.41	7.87	7.82
Conductivity (milliSiemens pe	er centimenter)		0.59	0.56	0.64	0.54	0.64	0.60	0.64	0.59	0.60	0.80	0.634	0.952 ¹	0.827 ¹	0.604	0.63	0.64	0.62	0.64	0.82
Turbidity (Nephelometric Tur	oidity Unit)		1.09	4.22	3.67	0.76	3.68	2.24	0.60	2.43	2.19	102	2.27	52.1	0.61	1.36	11.7	0.80	2.2	3.06	0.79
Dissolved Oxygen (milligram	s per liter)		1.33	0.47	0.11	1.44	0.56	0.8	1.19	3.45	4.99	3.8	4.08	0.19	3.22	0.38	0.3	3.04	1.21	0.25	11.74
Temperature (degrees Celsium	is)		14.66	9.23	15.71	10.33	17.45	9.90	15.19	10.39	14.72	10.83	14.1	11.75	13.89	11.33	10.6	14.60	10.96	12.7	8.6
Oxidation Reduction Potentia	l (millivolt)		75	-12.5	78.3	12.7	125.1	110.6	115.1	115	82.4	-17.4	-39.1	-155.3	27.7	101.4	-121.6	203.7	159.9	231.9	122

Sample Identification:	Residential Drinking	Groundwater Surface Water								Ob	servatio	n Well OW	-16D2								
Sample Collection Date:	Water Criteria	Interface Criteria	5/13/2020	11/17/2020	5/13/2021	6/8/2021	8/3/2021	8/16/2021	9/1/2021	9/13/2021	9/27/2021	10/11/2021	10/25/2021	11/8/2021	12/6/2021	1/4/2022	1/25/2022	2/17/2022	3/21/2022	4/4/2022	4/8/2022
Tetrachloroethene	5.0 (A)	60 (X)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	5.0 (A)	200 (X)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	70 (A)	620	<1.0	<1.0	17	10	16	13	16	20	18	12	17	17	8.2	15	15	12	18	19	20
trans-1,2-Dichloroethene	100 (A)	1,500 (X)	<1.0	<1.0	1.3	<1.0	1.6	1.1	1.3	1.7	1.7	1.1	1.6	1.5	<1.0	1.6	1.4	1.1	1.6	1.7	1.5
1,1-Dichloroethane	880	740	<1.0	<1.0	3.8	2.4	3.8	3.0	3.2	3.9	3.7	2.8	3.8	4.2	2.0	3.0	3.4	3.1	3.7	3.5	3.5
Vinyl chloride	2.0 (A)	13 (X)	<1.0	<1.0	3.5	1.2	3.0	1.8	1.7	1.6	1.8	1.4	1.5	1.5	<1.0	2.5	3.2	2.0	2.3	<1.0	<1.0
Field Parameters																					
Drawdown (feet)			4.2	10.2	0.0 ²	0.0 2	12.7	14.2	15.0	10.6	13.7	15.2	8.1	10.9	7.5	8.1	17.4	17.4	7.1	6.9	3.6
pH (standard units)			8.51	8.44	7.89	7.6	7.5	7.68	7.64	7.28	7.38	7.81	7.49	7.43	8.02	7.56	7.54	7.77	7.54	7.43	7.39
Conductivity (milliSiemens p	er centimenter)		0.78	0.71	0.93	0.85	0.93	0.718	1.011	1.03	1.07	0.97	1.09	1.07	0.84	1.1	1.11	0.985	1.082	1.1	1.1
Turbidity (Nephelometric Tur	bidity Unit)		2.29	1.08	59.6	5.29	33.8	6.82	3.86	3.9	9.44	9.05	10.7	10.1	4.74	28.4	13.7	4.9	3.04	96.3	41.9
Dissolved Oxygen (milligram	s per liter)		4.9	9.67	0.45	0.41	1.32	0.25	0.38	0.86	0.22	0.58	0.15	0.17	0.27	0.2	0.1	0.57	0.51	5.81	1.28
Temperature (degrees Celsion	us)		11.6	12.3	12.2	17.4	15.6	14.1	15	14.1	15	15.5	12.4	14	10.8	10.8	9.8	9.9	10.4	7.1	8.1
Oxidation Reduction Potentia	al (millivolt)		155.1	12.1	-134	-104.1	-99	-139.1	-74.7	-64.8	-89.9	-99.2	-88.2	-66.4	-14	-93.1	-96.7	-61.3	-72.3	3.0	-29.9

All volatile organic compound concentrations are in micrograms per liter (µg/L).

(A) Criterion is the State of Michigan Drinking Water Standard established pursuant to Section 5 of the Safe Drinking Water Act No. 399 of the Public Acts of 1976.

Attachment 4A - Lab Anlaytical Results and Parameters Summary Table-OW16D2.xlsx

⁽X) The Groundwater Surface Water Interface (GSI) criterion shown is not protective for surface water that is used as a drinking water source.

^{1.} Specific Conductivity

^{2.} Drawdown only checked at the beginning of the sampling event



Report Parameter	Units	Residential Drinking Water Criteria					OV	V0 9					OW09D				OW09	-ML-A		- / /0000	s (4 = 12000
			6/20/2007	3/20/2008	6/17/2008	12/23/2008	3/17/2009	6/17/2009	12/16/2009	3/17/2010	6/14/2010	12/15/2010	3/23/2006	6/19/2006		12/13/2006				3/20/2008	
1.1-Dichloroethane	ug/L	880	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 <1.0
cis-1,2-Dichloroethene	ug/L	70 (A)	1.9	1.7	1.6	1.6	1.7	1.7	1.5	1.5	1.7	1.4	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	ug/L	100 (A)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
Tetrachloroethene	ug/L	5.0 (A)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
		5.0 (A)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	ug/L				<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl chloride	ug/L	2.0 (A)	<1.0	<1.0	<1.0	<1.0	₹1.0	\1.0	\1.0	`1.0	11.0	11.0	2.0								



Report Parameter	Units	Residential Drinking Water Criteria								OW09	-ML-A contir	nued								
		Date:	12/23/2008	3/17/2009	6/17/2009	12/15/2009	3/16/2010	6/14/2010	12/15/2010	6/14/2011	12/13/2011	6/25/2012	6/10/2013	12/10/2013	6/2/2014	6/24/2015				
1.1-Dichloroethane	ug/L	880	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
,	ug/L	70 (A)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	, O,	. ,	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	ug/L	100 (A)		_		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrachloroethene	ug/L	5.0 (A)	<1.0	<1.0	<1.0		_		-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	ug/L	5.0 (A)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0					<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl chloride	ug/L	2.0 (A)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	\ 1.0	\1.0	\1.0	11.0	12.0		



Report Parameter	Units	Residential Drinking Water Criteria									ow09	-ML-B									- / - /22.4
		Date:	6/19/2006	9/21/2006	12/13/2006	3/21/2007	6/20/2007	12/19/2007	3/20/2008	6/17/2008	12/23/2008	3/17/2009	6/17/2009			6/14/2010	1		12/13/2011		
1.1-Dichloroethane	ug/L	880	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0
cis-1,2-Dichloroethene	ug/L	70 (A)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	ug/L	100 (A)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrachloroethene	ug/L	5.0 (A)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 <1.0	<1.0	<1.0	1.2	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	ug/L	5.0 (A)	1.5	<1.0	<1.0	1.6	1.8	1.2	1.1	1.2	1.4 <1.0	1.4 <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl chloride	ug/L	2.0 (A)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	\1.0	₹1.0	11.0	12.0	12.10				



Report Parameter	Units	Residential Drinking Water Criteria			OW09	-ML-B conti	inued									OW09-ML-C					
		Date:	12/10/2013	6/2/2014	6/24/2015	6/14/2016	6/12/2017	6/12/2018	6/11/2019	5/13/2021	6/19/2006	9/21/2006	12/13/2006	3/22/2007	6/21/2007	12/19/2007	3/20/2008	6/17/2008			6/17/2009
4.4 Bighlausethaus	ua/I	880	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	ug/L				<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.0	2.4	2.6	2.5	3.7	5.8	4.6	5.5	5.1	5.6	4.5
cis-1,2-Dichloroethene	ug/L	70 (A)	<1.0	<1.0							<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	ug/L	100 (A)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0								<1.0	<1.0	<1.0	<1.0
Tetrachloroethene	ug/L	5.0 (A)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				
				1.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.1	3.2	3.9	2.8	3.7	2.5	1.8	1.4	<1.0	<1.0	<1.0
Trichloroethene	ug/L	5.0 (A)	1.2	1.1			-	_			<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl chloride	ug/L	2.0 (A)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	\	\1.0	\1.0	\1.0	12.0	12.0	1.0				



Report Parameter	Units	Residential Drinking Water Criteria									(OW09-ML-C	continued									- 40 2000
			12/15/2009	3/16/2010	6/15/2010	12/15/2010	6/14/2011	12/13/2011	6/25/2012	6/10/2013	12/10/2013	6/2/2014	6/24/2015	6/14/2016	6/12/2017	6/12/2018	6/11/2019				11/10/2021	
	/1		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	ug/L	880			1.0		5.2	4.7	6.0	5.3	6.3	5.6	49	4.7	4.6	5.3	7.9	4.0	5.9	5.0	5.6	3.8
cis-1,2-Dichloroethene	ug/L	70 (A)	5.2	5.4	5.6	5.7	5.2	4.7	6.0		0.5		-1.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	ug/L	100 (A)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0			_	_			<1.0	<1.0	<1.0
		5.0 (A)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0			1.0
Tetrachloroethene	ug/L	<u> </u>		_				<1.0	<1.0	1.1	1 1	<1.0	<1.0	1.2	1.4	<1.0	<1.0	<1.0	<1.0	1.0	<1.0	1.5
Trichloroethene	ug/L	5.0 (A)	<1.0	<1.0	<1.0	<1.0	<1.0			1.1	1.1			<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl chloride	ug/L	2.0 (A)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	\1.0	₹1.0	11.0	11.0	-2.0		



Report Parameter	Units	Residential Drinking Water Criteria		OW09-ML-D																	
		Date:	6/19/2006	9/21/2006	12/13/2006	3/22/2007	6/21/2007	12/19/2007	3/20/2008	6/17/2008	12/23/2008	3/17/2009	6/17/2009	12/15/2009	3/16/2010						12/10/2013
1.1-Dichloroethane	ug/L	880	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
,			4.4	4.9	4.6	4.3	4.6	4.1	3.8	4	2.2	4.5	4.7	5.4	5.5	6.3	5.5	6.2	5.9	6.3	8.1
cis-1,2-Dichloroethene	ug/L	70 (A)				_	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	ug/L	100 (A)	<1.0	<1.0	<1.0	<1.0						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrachloroethene	ug/L	5.0 (A)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0		-			<1.0	<1.0	<1.0	<1.0
Trichloroethene	ug/L	5.0 (A)	2.2	2.1	2.3	1.9	2.1	1.5	1.6	1.5	<1.0	1.6	1.5	<1.0	<1.0	1.4	<1.0				
		. ,		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl chloride	ug/L	2.0 (A)	<1.0	<1.0	<1.0	\1.0	\1.0	\1.0	11.0	12.0											



Report Parameter	Units	Residential Drinking Water		OW09-ML-D continued											MW-03-94 (Village Milford Monitoring Well)													
		Criteria			1 - / / / - [5/10/0047	6/42/2010	C /4.4 /2.04.0	T /12/2020	11/17/2020	E/12/2021	11/10/2021	5/18/2022	3/2/2021	6/1/2021	8/6/2021	8/16/2021	9/7/2021	10/7/2021	11/8/2021	12/7/2021	1/4/2022	2/4/2022	3/10/2022	4/4/2022	5/3/2022	6/8/2022	7/8/2022
	Ļ	Date:	6/2/2014	6/24/2015	6/14/2016	6/13/201/	6/12/2018	6/11/2019	3/13/2020	11/11/2020	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	ug/L	880	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		7.0	8.1	2 1	2.1	3.0	3.0	2.8	3.0	2.9	2.0	3.0	<1.0	3.0	3.0	3.0	3.0	3.0
cis-1,2-Dichloroethene	ug/L	70 (A)	6.1	6.2	7.8	6.2	7.0	7.6	6.3	9.1	7.0	7.9		3.1	-1.0	<1.0	<1.0	0.7	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	ug/L	100 (A)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0			<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrachloroethene	ug/L	5.0 (A)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	ug/L	5.0 (A)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.8	<1.0	<1.0	<1.0	<1.0	<1.0			_	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl chloride	ug/L	2.0 (A)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	\1.0	\1.U	\1.U	-1.0

Attachment 5

April 8, 2022 ZF Letter to EGLE



ZF Active Safety US Inc. 12001 Tech Center Drive, Livonia, Michigan 48150-2122 Department Health Safety and Environmental

From Robert Bleazard
Phone +1 480 722-4866
Email Robert.Bleazard@zf.com

Date April 8, 2022

VIA E-MAIL TO: WojchiechowskiK@Michigan.gov

Kevin Wojciechowski, Project Manager Warren District Office Remediation and Redevelopment Division Michigan Department of Environment, Great Lakes, and Energy 27700 Donald Court Warren, Michigan 48092

RE: ZF Active Safety US Inc. Additional Information for Consideration by Michigan Department of

Environment, Great Lakes, and Energy Related to Administrative Order for Response Activity;

EGLE Docket No. AO-RRD-22-001.

Dear Mr. Wojciechowski,

ZF Active Safety US Inc. (ZF) appreciates the opportunity to meet with the Department of Environment, Great Lakes, and Energy (EGLE) last Thursday, March 31, 2022, to discuss the Administrative Order for Response Activity (AO) issued by EGLE to ZF, with respect to the former Kelsey-Hayes site in Milford, Michigan (the "Site").

As demonstrated by ZF's November 23, 2021 letter in response to EGLE's October 25, 2021 Compliance Communication and its presentation of information at the meeting, ZF and Arcadis have been reviewing the extensive data collected for the Kelsey-Hayes site, as well as any other available information, in order to understand the recent emergence of vinyl chloride in groundwater monitoring well OW-16D2 when that compound has not been detected at any time elsewhere in ZF's off-site monitoring well network in more than 25 years of monitoring. Furthermore, Arcadis recently noted an anomalous response in water level and certain groundwater parameters in the well during sampling, raising concerns regarding the possible integrity of the well screen and/or the sand pack surrounding the well screen. In addition, considering EGLE's concerns regarding the proximity of OW-16D2 to the Village of Milford municipal wells and the statement in the Administrative Order that "the presence of vinyl chloride in monitoring well OW-16D2, a known carcinogen, represents an imminent and substantial endangerment to the public health, safety, welfare, or the environment...," ZF and Arcadis carefully analyzed the current viability of OW-16D2 and began evaluating whether samples collected from this well are representative of the aquifer.

Arcadis initially questioned whether OW-16D2 may be compromised because there was significant drawdown in the well during most of the low-flow sampling events where vinyl chloride was detected and purge volumes were observed to be similar to the volume of standing water removed from the well. This indicated stagnant water conditions in the well. In addition, water samples with vinyl chloride detections had an oxidation reduction potential (ORP) in the range of -60 to -134 millivolts and low dissolved oxygen (DO) levels (see attached Table 1 – Attachment 1). These conditions within the well provide a reducing environment where anerobic microbes are active and reductive dichlorination of chlorinated volatile organic compounds (CVOCs) can occur (i.e., cis-1,2-dichloroethene to vinyl chloride). Furthermore, vinyl chloride has not been detected in the

six observation wells, OW-9, OW-09ML-A/B/C/D, and MW-03-94, located upgradient of OW-16D2, in the Village of Milford drinking water wells, or in any of the other monitoring wells regularly sampled by Arcadis that have proven to be reliable in monitoring other CVOCs including trichloroethene (TCE). Collectively, these multiple lines of evidence are what caused Arcadis to take a closer look at the condition of OW-16D2 and also suggests that the recent detection of vinyl chloride in OW-16D2 is localized, anomalous, and warrants further evaluation. The inability of OW-16D2 to sustain EGLE's low-flow sampling and groundwater parameter stabilization requirements also indicates that groundwater samples collected from OW-16D2 are: 1) not representative of groundwater conditions; 2) not comparable to EGLE's Part 201 Cleanup Criteria for compliance purposes; and 3) therefore not a reliable basis for the conclusion by EGLE that OW-16D2 poses an imminent and substantial endangerment to the Village of Milford wells.

As Arcadis has previously discussed with you and as mentioned during the meeting, ZF's monitoring well OW-16D2 was further examined and redeveloped on Friday, April 1st with the objective of improving hydraulic communication between the well and formation to produce representative groundwater samples. During the examination and redevelopment of OW-16D2, Stearns, the well driller, used a surge block with a vacuum hose attachment to work up and down within the well screen and draw out sediments consistent with standard practice. Stearns moved this apparatus up and down within the well screen several times. During the process, there was initial discolored water and some fine sediment removed and then it cleared up. The plan was to then drop a pump down the well and purge water/groundwater as it re-entered the well, removing as much water as possible. However, after pulling the surge block apparatus out of the well, there was only about 2 feet of water remaining in the well (approximately 1/3 gallon). The amount of water in the well when Stearns started the redevelopment process was about 100 feet (approximately 16 gallons). This indicates that the well screen, sand pack, and/or formation around the screen is not functioning as designed. Arcadis measured the level of water in the well after this work and it recovered very slowly, at a rate of less than 1 foot per hour. Based on these observations, it appears that the water in the screened interval of the well was stagnant and therefore not fully representative of groundwater conditions in the aquifer. These well redevelopment findings, combined with the observations noted above regarding well behavior during sampling, indicate that OW-16D2 has become compromised and cannot be relied on for continued groundwater monitoring without further evaluation and potential corrective action on the well.

Following the redevelopment, Arcadis returned to sample OW-16D2 on Monday, April 4th and observed that the depth to groundwater was about 50 feet (so about 50 feet had recovered over the weekend). Arcadis used a low-flow bladder pump to purge the well (this took about 2 hours) and then sampled the well. The total drawdown of the well was approximately 7 feet during the sampling. Arcadis observed the water level in OW-16D2 to be relatively level for the last 10 minutes prior to sampling, indicating that the recharge was coming from the aquifer and not stagnant water within the well. One set of groundwater samples was collected on April 4th and was dropped off at Fibertec (Holt, Michigan) the same day, with a requested 48-hour turn-around-time and another set of samples was sent to Eurofins-TestAmerica for analysis under a standard turn-around-time. Analysis for volatile organic compounds using EPA Method 8260 was requested for both sets of samples.

The results from the Fibertec samples were returned on April 6th and as you know, were non-detect (less than 1.0 ug/L detection limit) for vinyl chloride. In contrast, cis-1,2-dichloroethene, trans-1,2-dichloroethene, and 1,1-dichloroethane were detected and the concentrations of these other CVOCs were consistent with previous samples collected from OW-16D2, indicating that these compounds are stable in the formation water that entered OW-16D2 after development and are not degrading to vinyl chloride in the vicinity of OW-16D2. The laboratory

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analytical report (Attachment 2) was provided to you on April 6th. These findings, combined with the previous OW-16D2 sampling results and the well redevelopment observations described above show that the production of vinyl chloride appears to be a function of stagnant water within the well caused by the malfunctioning well itself. Additional samples from OW-16D2 will be collected on April 8th and April 18th. Arcadis will sample the well under as close to low-flow conditions as the well is able to sustain and will promptly report the results to EGLE.

Based on the observed conditions of OW-16D2 during the recent sampling and redevelopment of the well and the historical information provided above, there is an objectively reasonable and technical basis to conclude that the recent samples collected before the redevelopment of the well should not be relied upon as accurate representations of aquifer conditions in that location. Specifically, the following observations point to a lack of reliability for recent vinyl chloride results collected from OW-16D2:

- Inability of the OW-16D2 monitoring well to sustain low-flow purging/sampling consistent with EGLE guidelines;
- Recent consistent reducing conditions (i.e., negative ORP, low DO) with stagnant water conditions observed
 in OW-16D2, correlating with the observance of vinyl chloride detections that have improved after well
 redevelopment;
- The first occurrence of vinyl chloride in May 2021 after more than 25 years of monitoring, and its subsequent lack of detection following redevelopment of OW-16D2; while other CVOCs in OW-16D2 remained consistent with historical results;
- Continuing lack of vinyl chloride detections in any other monitoring wells, notably those that have unquestionably demonstrated the extent of TCE impacts, the presumed parent CVOC for dichlorination daughter products;
- Lack of vinyl chloride detections in Village of Milford municipal wells despite groundwater velocity calculations showing it would have arrived months ago if mobile.

Collectively, these findings provide compelling evidence of data quality concerns for OW-16D2 that must be further evaluated and corrected. It is imperative that any conclusions drawn from OW-16D2 sample results and determinations of potential additional response activities are based on accurate and reliable, representative data collected from a properly-performing monitoring well in accordance with EGLE requirements. Therefore, ZF intends to continue to evaluate OW-16D2 and collect additional data for this well which will be expedited and reported to EGLE as soon as available. We are planning to re-sample OW-16D2 on April 8th one week following redevelopment as previously discussed with you via email on April 1st. OW-16D2 will also be sampled again on April 18th.

In addition to the additional monitoring planned for OW-16D2, ZF is also evaluating potential corrective measures for the well including, further well rehabilitation using an approvable drinking water well additive as was communicated with EGLE via email on April 4th, and a downhole camera survey of the well. ZF is also evaluating potentially replacing OW-16D2 if the rehabilitation is not feasible or not successful, as you suggested. Such corrective measures would include a work plan that would be submitted to EGLE for review and approval, and careful coordination with the Village of Milford to ensure protection of the municipal wells.

In light of the recent findings regarding OW-16D2 detailed above and considering that the basis for the AO is EGLE's determination that the vinyl chloride reported in recent samples from OW-16D2 above the Part 201 Drinking Water Criterion, pose an imminent and substantial endangerment to the Village of Milford municipal wells due to their proximity to OW-16D2, it would be prudent for all parties to have reliable data and an objective basis for decisions moving forward. Allowing ZF more time to remedy OW-16D2 and collect accurate data from the well will allow the parties to make a proper technical determination of whether vinyl chloride is in the aquifer at the location of OW-16D2. This information would also provide a strong basis to determine if there is any reasonably objective and technical need to implement the response activity required by the AO and would further serve to inform future discussions and decisions by EGLE, the Village of Milford, and ZF. ZF will follow-up this correspondence with the sample results to be collected from OW-16D2 on April 8th, which we expect to receive from the lab by April 12th, and with our plans to implement the OW-16D2 rehabilitation and/or replacement as necessary. ZF will also provide a formal response to the AO, but wanted to provide you with this recently obtained additional information for your consideration at this time.

Thank you for your attention to these matters and please include this letter and its attachments in the administrative record for the AO and the Site.

If you have any questions, please feel free to contact me at the phone number listed in the header on the first page of this letter, Mr. Scott Detwiler – ZF Project Manager at 480-722-4139, or Mr. John McInnis of Arcadis at 248-994-2285.

Sincerely,

Robert Bleazard

Sr. EHS Manager – Environmental Remediation

ZF Health, Safety, and Environment

Robert A Bleazane

Enclosure

cc by email only:

Mr. Scott Detwiler, ZF

Mr. Robert Bleazard, ZF

Ms. Kelly Martorano, ZF

Mr. John McInnis, Arcadis

Mr. Troy Sclafani, Arcadis Mr. Grant Gilezan, Dykema

Mr. Paul Stewart, Dykema

Mr. Christian Wuerth, Village Manager, Village of Milford

Ms. Polly Synk, Michigan Department of Attorney General

Ms. Danielle Allison-Yokom, Michigan Department of Attorney General

Mr. Aaron B. Keatley, EGLE - Chief Deputy Director, EGLE

Mr. Mike Neller, EGLE - Remediation and Redevelopment Director

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Page 5 of 5 April 8, 2022

Mr. Josh Mosher, EGLE – Remediation and Redevelopment Assistant Director

Mr. Dan Yordanich, EGLE

Ms. Mary Miller, EGLE

Mr. Darren Bowling, EGLE

Mr. Paul Owens, EGLE

Ms. Cheryl Wilson, EGLE

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ATTACHMENT 1

Table 1 OW16D2 Groundwater Analytical Results and Field Parameters Former Kelsey-Hayes Milford Plant



Sample Identification:	Residential Drinking Water	Groundwater Surface Water Interface	Observation Well OW-16D2																		
Sample Collection Date:	Criteria	Criteria	6/15/2010	12/17/2010	6/15/2011	12/14/2011	6/29/2012	12/12/2012	6/12/2013	12/11/2013	6/15/2014	11/24/2014	6/24/2015	12/9/2015 ¹	6/14/20161	12/13/2016	12/6/2017	6/12/2018	12/4/2018	6/10/2019	12/3/2019
Tetrachloroethene	5.0 (A)	60 (X)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	5.0 (A)	200 (X)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	70 (A)	620	2.4	3.2	2.1	<1.0	1.4	12	<1.0	3.4	<1.0	22	<1.0	19	<1.0	1.7	18	<1.0	4.1	1.2	1.1
trans-1,2-Dichloroethene	100 (A)	1,500 (X)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.3	<1.0	1.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	880	740	<1.0	<1.0	1.1	<1.0	<1.0	2.1	<1.0	<1.0	<1.0	3.0	<1.0	2.3	<1.0	<1.0	1.9	<1.0	2.1	1.6	1.4
Vinyl chloride	2.0 (A)	13 (X)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Field Parameters																					
Drawdown (feet)			-0.3	2.8	0.0	1.5	0.0	0.0	0.0	0.0	0.0	1.3	0.4	5.1	4.7	12.2	8.4	4.6	5.5	8.5	3.5
pH (standard units)			7.36	7.74	7.82	7.44	7.60	7.57	7.90	7.85	7.17	7.79	7.82	7.56	7.62	7.91	8.05	7.67	7.41	7.87	7.82
Conductivity (milliSiemens pe	r centimenter)		0.59	0.56	0.64	0.54	0.64	0.60	0.64	0.59	0.60	0.80	0.634	0.952 1	0.827 1	0.604	0.63	0.64	0.62	0.64	0.82
Turbidity (Nephelometric Turt	oidity Unit)		1.09	4.22	3.67	0.76	3.68	2.24	0.60	2.43	2.19	102	2.27	52.1	0.61	1.36	11.7	0.80	2.2	3.06	0.79
Dissolved Oxygen (milligrams	s per liter)		1.33	0.47	0.11	1.44	0.56	8.0	1.19	3.45	4.99	3.8	4.08	0.19	3.22	0.38	0.3	3.04	1.21	0.25	11.74
Temperature (degrees Celsiu	is)		14.66	9.23	15.71	10.33	17.45	9.90	15.19	10.39	14.72	10.83	14.1	11.75	13.89	11.33	10.6	14.60	10.96	12.7	8.6
Oxidation Reduction Potentia	(millivolt)		75	-12.5	78.3	12.7	125.1	110.6	115.1	115	82.4	-17.4	-39.1	-155.3	27.7	101.4	-121.6	203.7	159.9	231.9	122

Sample Identification:	Residential Drinking Water	Groundwater Surface Water Interface	Observation Well OW-16D2																	
Sample Collection Date:	Criteria	Criteria	5/13/2020	11/17/2020	5/13/2021	6/8/2021	8/3/2021	8/16/2021	9/1/2021	9/13/2021	9/27/2021	10/11/2021	10/25/2021	11/8/2021	12/6/2021	1/4/2022	1/25/2022	2/17/2022	3/21/2022	4/4/2022
Tetrachloroethene	5.0 (A)	60 (X)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	5.0 (A)	200 (X)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	70 (A)	620	<1.0	<1.0	17	10	16	13	16	20	18	12	17	17	8.2	15	15	12	18	19
trans-1,2-Dichloroethene	100 (A)	1,500 (X)	<1.0	<1.0	1.3	<1.0	1.6	1.1	1.3	1.7	1.7	1.1	1.6	1.5	<1.0	1.6	1.4	1.1	1.6	1.7
1,1-Dichloroethane	880	740	<1.0	<1.0	3.8	2.4	3.8	3.0	3.2	3.9	3.7	2.8	3.8	4.2	2.0	3.0	3.4	3.1	3.7	3.5
Vinyl chloride	2.0 (A)	13 (X)	<1.0	<1.0	3.5	1.2	3.0	1.8	1.7	1.6	1.8	1.4	1.5	1.5	<1.0	2.5	3.2	2.0	2.3	<1.0
First Depth to Water																				
Field Parameters																				
Drawdown (feet)			4.2	10.2	0.0	0.0	12.7	14.2	15.0	10.6	13.7	15.2	8.1	10.9	7.5	8.1	17.4	17.4	7.1	6.9
pH (standard units)			8.51	8.44	7.89	7.6	7.5	7.68	7.64	7.28	7.38	7.81	7.49	7.43	8.02	7.56	7.54	7.77	7.54	7.43
Conductivity (milliSiemens pe	er centimenter)		0.78	0.71	0.93	0.85	0.93	0.718	1.011	1.03	1.07	0.97	1.09	1.07	0.84	1.1	1.11	0.985	1.082	1.1
Turbidity (Nephelometric Turl	2.29	1.08	59.6	5.29	33.8	6.82	3.86	3.9	9.44	9.05	10.7	10.1	4.74	28.4	13.7	4.9	3.04	96.3		
Dissolved Oxygen (milligrams	4.9	9.67	0.45	0.41	1.32	0.25	0.38	0.86	0.22	0.58	0.15	0.17	0.27	0.2	0.1	0.57	0.51	5.81		
Temperature (degrees Celsiu	is)		11.6	12.3	12.2	17.4	15.6	14.1	15	14.1	15	15.5	12.4	14	10.8	10.8	9.8	9.9	10.4	7.1
Oxidation Reduction Potentia	l (millivolt)		155.1	12.1	-134	-104.1	-99	-139.1	-74.7	-64.8	-89.9	-99.2	-88.2	-66.4	-14	-93.1	-96.7	-61.3	-72.3	3.0

Notes:

All volatile organic compound concentrations are in micrograms per liter (µg/L).

(A) Criterion is the State of Michigan Drinking Water Standard established pursuant to Section 5 of the Safe Drinking Water Act No. 399 of the Public Acts of 1976.

(X) The Groundwater Surface Water Interface (GSI) criterion shown is not protective for surface water that is used as a drinking water source.

1 Specific Conductivity

ATTACHMENT 2



Wednesday, April 06, 2022

Fibertec Project Number:

A07755

Project Identification:

TRW Milford ZF Active Safety (30046730) /30046730

Submittal Date:

04/04/2022

Mrs. Marina Samp Arcadis U.S., Inc. - Novi 28550 Cabot Drive Suite 500 Novi, MI 48377

Dear Mrs. Samp,

Thank you for selecting Fiberiac Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345;

Sincerely,

By Soo Ricketts at 12:26 PM, Apr 86, 2022

For Daryl P. Strandbergh Laboratory Director

Enclosures



Order: Page: Date: A07755 2 of 10 04/06/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: FIELDBLANK_040422 Chain or Clustody: 201041

Client Project Name: TRW Milliord ZF Active Safety (30046730)

Client Project No. 30046730 Sample Maint: Blank: Field Collect Time: 11:45

Sample Comments:

Definitions: 0: Qualifier (see definitions at end of report) NA: Not Applicable 4: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Aliquot ID: AU7755-001 Matrix: Blank: Field Method: EPA 5030C/EPA 8260D Description: FIELDBLANK 040422

Paramelor(s)	Résult	o	Units	Reporting Limit	Dhutton	Prepa P. Date	ration P. Balch	A. Date	alysis A. Batch	"Ville
1.Acetone	0	3.5	µg/L	50	1.0	04/05/22	V122005B	04/05/22 00:21	V1220069	JME
1 2.Adylonitrie	U.		pg/L	2.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	V)220068	JIME
3.Bergana	ш		pp/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 00:21	V122005B	JAME
4. Bromoberize ne	U.		pg/L	1.0	1.0	84/05/22	V122D05B	0405/22 00:21	V122D05B	JME
5. Bromochloromethane	U		PD/L	1.0	1.0	04/05/22	V122005B	0406/22 00:21	V122006B	JMF
6. Bromodichioromethane	U		pg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	V122005B	JMF
7. Bromotorm	H		pays.	10	1.0	04/05/22	VI22D05B	0405/22/00:21	V122D05B	JMF
8, Bromomethane	Ц	V-	pg/L	5.0	1.0	04/05/22	V122D05B	04/06/22 00:21	V122005B	JMF
9.2-Butanone	U		μg/L	25	1.0	04/05/22	VI22005B	04/05/22 00:21	V/22005B	JIME
10. n-Buly/benzene	U		pg/L	1.0	1,0	04/05/22	VI22005B	04/06/22 00:21	V122005B	JMF
11. sec-Buly/benzene	H		pg/L	10	1.0	04/05/22	V122D05B	0405/22 00:21	V122D05B	JMF
12. teri-Butylberwene	Ų		pg/L	1.0	1.0	04/05/22	V122D05B	04/06/22 00:21	V122005B	JMF
13, Carbon Disultide	ш		jig/L	5.0	1.0	04/05/22	VI22065B	0406/22/00:21	V1220059	JMF
14. Carbon Tetractionide	U		pg/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 00:21	VI22005B	JIME
15. Chloroberzene	U.		µg/L	1.0	1.0	04/05/22	V122D05B	04/05/22 00:21	V122005B	JMF
16. Chloroe thane	U		pp/t.	5.0	1.0	04/05/22	VI22D05B	04/05/22 00:21	V1220058	JME
17, Chloroform	B		µg/L	1.0	1.0	04/05/22	VI22005B	04/05/22 00:21	V/220058	JIMF
18. Chloromethane	U	N-	HQT.	5.0	1,0	04/05/22	VI22005B	04/06/22 00:21	V122D05B	JIME
19.2-Chlorolouene	- 0		µg/L	5.0	1.0	04/05/22	VI22005B	04/06/22 00:21	V1220068	JMF
z 20.1,2-Dibromo-3-chloropropane (SIM)	0		HD/L	1.0	1.0	04/05/22	V122D05B	04/05/22 00:21	V122D05B	JMF
21. Dibromochioromethane	H		pg/L	5.0	1.0	04/06/22	V122D05B	04/05/22 00:21	V122D05B	JIME
22. Dibromomethane	U		µg/L	5.0	1.0	04/05/22	VI22D05B	04/05/22 00:21	V/22/005B	JIME
23. 1,2 Dichioropenzene	U		pg/L	1.0	1.0	04/05/22	VI22005B	04/06/22 00:21	V1220059	JMF
24.1,3-Dichlorobenzene	- 13		pgr	1.0	1.0	84/05/22	V122D05B	04/05/22 00:21	V122D05B	JME
25.1,4-Dichlorobenzene	U.		PDYL	1.0	1.0	04/05/22	V122005B	0406/22 00:21	V122005B	JASE
26. Dichlorodituoromethane	U		µg/L	5.0	1.0	04/05/22	VI22005B	04/06/22 00:21	V122005B	JMF
27.1.1-Dichloroethane	U		ha/r	1.0	1.0	04/05/22	VI22005B	0405/22 00:21	V/22D058	JMF
28.1,2-Dichloroethane	U		µg/L	1.0	1.0	04/05/22	V122D05B	04/06/22 00:21	V 122005B	JME
29. I,1-Dichioroethene	U		HD/L	10	1.0	04/05/22	VI22D05B	0406/22 00:21	V122D058	JMF
30. cis-1,2-Dichioroethene	U		pg/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 00:21	V122005B	JMF
31, Irans-1,2-Dichloroethene	ш		µg/L	1.0	1.0	04/05/22	V122005B	04/05/22 00:21	V)220058	JIME
32: 1,2-Dichloropropane	U		µg/L	1.0	1.0	04/05/22	V122D05B	04/06/22 00:21	V/220068	JMF
33. cts-1,3-Dichloropropene	U		µg/L	0.50	1.0	04/05/22	VI22D05B	04/05/22 00:21	V122005B	JM
34. trans-1,3-Dichioropropene	U.		pg/L	0.50	1.0	04/05/22	V122D05B	04/05/22 00:21	V122D05B	JMF
35, Etrythenzene	Ü		µg/L	1.0	1.0	04/05/22	VI22005B	04/06/22 00:21	V/22005B	JIME
36. Ethylene Dibromide	ш		pg/L	1.0	1.0	04/05/22	V122D05B	04/06/22 00:21	V122005B	JMF

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Codillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368 F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584



Order: Page: Date:

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Client Identification: Arcadis U.S., Inc. - Novi Sample Description: FIELDBLANK 040422

Blank: Fleid

Chain of Custody: Collect Date:

201041

Client Project No. 30046730

Client Project Name: TRW Millord ZF Active Salety (30046730)

Sample No: Sample Matrix

Called Time:

04/04/22

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable :: Parameter not included in NELAC Scope of Analysis.

11:45

Volatile Organic Compounds (VOCs) by GC MS Mairtx: Blank: Fleid Allquot ID: A 07755-001

Method: EPA 5030C/EPA 8260D Description: FIELDBLANK_040422

Paramelenisi	Result	a	Units	Reporting Limit	Dilutton	Propa P. Date	ration P. Balch	A. Date	alysis A Batch	Init
37.2-Hexamine	N.	E2200	port	50	1,0	04/05/22	VI22005B	04/05/22 00:21	V122D06B	JM
38. Isopropyibenzene	U		µg/L	5.0	1.0	04/05/22	VI22005B	04/06/22 00:21	V122006B	JM
59, 4-Methyl-2-pentanone	U		µg/L	50	1,0	04/05/22	VI22005B	04/05/22 00:21	V122D068	JM
40. Methylene Chloride	U		pg/L	5.0	1.0	04/05/22	VI22005B	04/06/22 00:21	V122006B	JM
# 41,2-Meltrytnephinslene	U		MOVE.	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	V/22/0068	UMB
42.MTBE	0		µg/L	5.0	1.0	04/05/22	V122D05B	04/06/22 00:21	V122D05B	JIME
43.Naphthalene	U		µg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22:00:21	V122006B	JME
44, n-Propy/benzene	U		pg/L	1.0	1.0	04/05/22	VI22005B	04/05/22 00:21	V 0220068	JM
45. Styrena	U		µg/L	1.0	1.0	04/05/22	VI22005B	04/06/22 00:21	VI220058	JM
45.1,1,1,2-Tetrachloroethane	U		µg/L	1.0	3.0	04/05/22	VI22D05B	04/06/22 00:21	V122D06B	JM
47,1,1,2,2-Tetrachtoroethane	N.		pg/L	1.0	1.0	04/05/22	VI22005B	04/06/22 00:21	V (220)058	JM
48, Tetrachioroethene	U		µg/L	1.0	1,0	04/05/22	VI22005B	04/06/22 00:21	V122D06B	JM
49. Toluene	U		µg/L	1,0	1.0	04/05/22	V122D05B	04/06/22 00:21	VI22D068	JM
50.1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	V 122006B	JM
51.1,1,1-Trichloroethane	U		pg/L	10	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22005B	JM
= 52,1,1,2-Trichloroethane	U		PD/L	100	1.0	04/05/22	VI22D05B	04/06/22 00:21	V122D05B	JM
53. Trichloroethene	U		µg/L	1.0	1.0	04/05/22	V122005B	04/06/22:00:21	V1220058	JME
54. Trichkroftuorome thane	U		pp/i_	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	V122006B	JAM
55.1,2,3-Trichloropropane	U		µg/L	1.0	5.0	04/05/22	VI22005B	0496/22 00:21	V122006B	JM
56.1,2,3-Trimethylbenzene	U		pg/L	1.0	1.0	04/05/22	V122D05B	04/06/22 00:21	V122006B	JM
57. 1.2.4-Trimethylbenzene	-0		ug/t.	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	V122D06B	JM
58.1,3,5-Trimethylbenzene	Ð		pg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	V122D05B	JIM
59, Vinyl Chiodde	:8		µg/L	1.0	3.0	04/05/22	VI22005B	04/06/22 00:21	V122D058	am
60. māp-Xylene	,U		pay.	2.0	9.0	04/05/22	VIZ2D05B	04/05/22 00:21	V/22006B	JM
61.o-Xylane	U		HOL	1.0	1.0	04/05/22	VI22005B	04/06/22/00:21	V122D058	JM
F 62 Xylenes	υ		po/L	3.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	V122D05B	JMF



Order: Page: Date: A07755 4 of 10 04/05/22

Client Identification: Arcadis U.S., Inc. - Nov! Sample Description: OW-16D2_040422 Chain of Custody: 201041
Client Project Name: TRW Milliord ZF Active Salety Sample No: Collect Date: 04/04/22

(30046730) Sample Mains: Ground Water Collect Time: 11:55

Sample Comments:

Client Project No.

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable :: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS
Alliquot ID: A07755-002 Matrix: Ground Water
Method: EPA 5030C/EPA 8260D
Description: OW-16D2_040422
Preparation A

Parameter(s)	Result	a	Units	Reporting Limit	Dilution	Prepa P. Date	ration P. Batch	An Date	alysis A. Balch	init
1,Acetone	U.		pg/L	150	1.0	04/05/22	VI22D05B	04/06/22 02:59	V1220058	JM
1 2.Acrylontinie	U		pp/L	2.9	1.0	04/05/22	V122D05B	04/05/22 02:59	V1220058	JM
3. Bergene	U		µg/L	1.0	1.0	04/05/22	VI22005B	04/05/22 02:59	V (220058	JMP
4. Bromobenze ne	U		PQ/L	1.0	1,0	04/05/22	V122D05B	04/06/22 02:59	V122D05B	JIME
5. Bromochioromethare	Ü		HO'L	1.0	1.0	04/05/22	V22005B	04/05/22 02:59	V/22005B	JM
6. Bromodichloromethane	U		HD/E	1.0	1.0	04/05/22	V122D05B	04/06/22 02:59	V122005B	JM
7. Bromoform	U		HQ/L	1.0	1.0	04/05/22	V122005B	04/06/22 02:59	V (220059	JM
8. Bromomethane	u	V-	h0/L	5.0	1.0	04/05/22	V122D05B	04/06/22 02:59	V1220058	JM
9.2-Butanore	U		pg/L	25	1.0	04/05/22	VI22D05B	04/06/22 02:59	V1220058	JM
10. n-Bulylbenzene	0		Hg/L	1.0	1.0	04/05/22	V122D05B	04/06/22 02:59	V122005B	JM
11, sec-Buly/benzene	U		µg/L	1.0	1.0	04/05/22	V122005B	04/06/22 02:59	V1220059	JM
12, terl-Buty/berzene	U		HQ/L	1.0	1.0	04/05/22	V122D05B	04/05/22 02:59	V/22005B	JM
13. Carbon Disulfide	U		pp/L	5.0	1.0	04/05/22	V122D05B	04/05/22 02:59	V122005B	JM
14. Carbon Tetrachloride	U.		pg/L	1.0	1.0	04/05/22	V122D05B	04/05/22 02:59	V122D05B	JM
15. Chloroberzene	U		µg/L	1.0	1.0	04/05/22	VI22005B	04/06/22 02:59	V/22005B	.IM
16. Chiorpe thane	Ü		µg/L	5.0	1,0	04/05/22	VI22005B	04/06/22 02:59	V122005B	JM
17, Chloroform	H		pg/L	3.0	1.0	04/05/22	V122D05B	04/05/22 02:59	V122D05B	JM
18. Ohlorometriane	U	M-	pg/L	5.0	1.0	04/05/22	V122D05B	04/06/22 02:59	V122005B	JM
19.2-Chlorotatuene			pg/L	50	1.0	04/05/22	VI22D05B	0406/22 02:59	V1220058	JM
20.1,2-Dibromo-3-chloropropane (SIM)	U		pg/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 02:59	V 122005B	JM
21, Dibromochipromethane	U		µg/L	5.0	1.0	04/05/22	VI22005B	04/06/22 02:59	V1220059	JM
22. Dibromomelhane	U		pp/L	5.0	1.0	04/05/22	VI22D05B	04/05/22 02:59	V (220058	JM
23. 1,2-Dichlorobenzene	U		µg/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 02:59	V122005B	JM
24.1.3 Dichlorobenzene	U		HQ/L	1.0	1.0	04/05/22	VI22005B	94/06/22 92:59	V122D058	JM
25. 1,4 Dichicropenzene	Ü		HOYL	1.0	1.0	04/05/22	V122D06B	04/06/22 02:59	V (22005B	JIM
26. Dichlorodifluoromethene	0		HD/L	5.0	1.0	04/05/22	V122D05B	04/05/22 02:59	V122005B	JM
27.1,1-Dichie celhane	3.5		pg/L	10	1.0	04/05/22	V122D05B	04/05/22 02:59	V122D05B	JM
28.1,2-Dichloroethane	U		pg/L	1.0	1.0	04/05/22	V122D05B	04/06/22 02:59	V/22/005B	JIM
29.1,1-Dichiproelhene	Ш		pg/L	1.0	1.0	04/05/22	VI22005B	04/06/22 02:59	V1220058	JM
30. cls-1,2-Dichioroethene	19		PD/L	1.0	1.0	04/05/22	V122D05B	04/05/22 02:59	V122005B	JM
31, trans-1,2 Dichloroethene	1.7		pg/L	1.0	1.0	04/05/22	V122D05B	04/06/22 02:59	V122005B	JM
32.1,2 Dichloropropane	Ш		hb/r	1.0	1.0	04/05/22	VI22D05B	04/05/22 02:59	V1220058	JM
33, cis-1,3-Dichioropropene	D		hD/r	0.50	1.0	04/05/22	VI22005B	04/05/22 02:59	V (22D058	JM
34. trans-1;3-Dichioropropene	Ü		hQ/L	0.60	1,0	04/05/22	VI22005B	04/05/22 02:59	V122D05B	JIM
36. Ethybercane	ш		(4 1 /1.	10	1.0	04/05/22	VI22005B	04/05/22 02:58	V1220058	JM
36. Ethylene Dibromide	υ		HD/L	120	1.0	04/05/22	V122D05B	04/06/22 02:59	V122D05B	JM

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Order. Page: Date:

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Client Identification:

Arcadis U.S., Inc. - Novi

Sample Description: OW-1602_040422

Chain of Custody:

201041

Client Project Name: TRW Millord ZF Active Safety

Sample No:

Collect Date:

04/84/22

Client Project No:

(30046730) 30046738

Sample Matrix:

Ground Water

Collect Time:

11:55

Sample Comments:

Definitions:

Q: Qualifler (see definitions at end of report) NA: Not Applicable #: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Method: EPA 5030C/EPA 8260D

Allquot ID: A07755-002

Mairtx: Ground Water

Description: OW-16D2_040422

	ectronic et al.					Prepa	ration	An	alysis	
Parameter(s)	Result	0	Units	Reporting Limit	Dilutton	P. Dale	P. Balon	A. Date	A. Batch	inti
37.2-Hexanone	U		pgt	50	1.0	04/05/22	VI220058	04/06/22 02:59	V/220059	JM
38. isopropyiberizene	U		µg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	V122005B	JM
39. 4-Melhyl-2-pentanone	H		pg/L	50	1.0	04/05/22	V122D05B	04/05/22 02:59	V122D05B	JIM
40. Methylene Chloride	U		pg/L	5.0	1.0	04/05/22	V122D05B	04/06/22 02:59	V (22005B	JM
F 41.2-Melnytriaphthalene	U		pg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	V122D058	JM
42.MTBE	U		pg/L	5.0	1.0	04/05/22	VI22D05B	04/05/22 02:59	V/22005B	JM
43. Naphihalene	U		µg/L	5.0	1.0	04/05/22	VI22005B	04/06/22 02:59	V122005B	JM
44. n- Propytbenzene	U		ppr.	1.0	1.0	04/05/22	VI22D05B	04/05/22 02:59	V1220058	JM
45. Styrene	U		µg/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 02:59	V122005B	JM
45.1.1,1.2 Tetrachloroethane	U		µg/L	1.0	1.0	04/05/22	VI22D05B	94/06/22 02:59	V122D05B	JIME
47. 1, 1, 2, 2- Tetrachloroethane	0		HQ/L	1.0	1.0	04/05/22	V22005B	04/05/22 02:59	V/22005B	JIM.
49. Tetrachiproethene	U		HD/L	1.0	1.0	04/05/22	V122D05B	04/05/22 02:59	V122D05B	JM
49. Tokidene	U.		pp).	1.0	1.0	04/95/22	V122D05B	DW05/22/02:59	V122D05B	JIM
50.1,2,4-Tridnigroberizene	U		HQ/L	5.0	1.0	04/05/22	V122D05B	04/05/22 02:59	V/22005B	JIM
51, 1.1,1-Trichloroethane	U		jug/L	1.0	1.0	04/05/22	V122005B	04/06/22 02:59	V1220059	JM
1 52.1,1,2-Trichiproethane	U		pg/L	1.0	1.0	84/05/22	V122D05B	04/05/22 02:59	V122D05B	JM
53. Trichloroethene	U		PDYL	1.0	1.0	04/05/22	V122005B	04/06/22 02:59	V122005B	JM
54. Trichlorofluoromethane	U		HQ/L	1.0	1.0	04/05/22	VI22005B	04/06/22 02:59	V122005B	JM
55. 1,2.3-Trichloropropane	U		µg/L	1.0	1.0	04/05/22	VI22005B	04/05/22 02:59	V 220059	JM
# 56.1,2,3-Trimethylbenzene	Ü		µg/L	1.0	1.0	04/05/22	V122005B	04/06/22 02:59	V122D068	JM
57.1,2,4-Trimethylbenzene	U		HD/L	10	1.0	04/05/22	VI22D05B	04/06/22 02:59	V1220058	JM
58.1,3,5-Trimethylbenzene	U		pg/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 02:59	V/22005B	JM
59. Vinyl Chloride	U		pg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	V1220058	JM
50.m&p-Xylene	U		pp/L	2.0	1.0	04/05/22	VI22D05B	04/05/22 02:59	V1220058	JM
61.o-Xylene	U		µg/L	(.0	1.0	04/05/22	VI22D05B	04/05/22 02:59	V122005B	JM
‡ 62.Xylenes	LI.		pg/L	3.0	1.0	04/05/22	V122D05B	04/05/22 02:59	V122D05B	JM



Order. Page: Date:

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Client Identification: Arcadis U.S., Inc. - Novi

Sample Description: EQUIPMENTBLANK_040422

Chain of Custody:

201041

Client Project Name: TRW Milliord ZF Active Safety

Sample No:

Collect Date:

04/84/22

Client Project No.:

(30046730)

Sample Matrix:

Blank: Equipment

Collect Time:

12:10

Sample Comments:

Definitions:

Q: Clualifler (see definitions at end of report) NA: Not Applicable #: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Method: EPA 5030C/EPA 9260D

30046738

Allquot ID:

A07755-003

Maurk: Blank: Equipment

Description: EQUIPMENTBLANK_040422

Parameter(s)	Result	0	Units	Reporting Limit	Dilution	Prepa P. Dale	ration P. Balch	A. Date	A. Batch	ini
T.Acetone	U		pyL	50	1.0	04/05/22	VI220058	04/05/22 00:48	V /22005/9	JW
2.A crylonitrie	U		µg/L	2.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	V122005B	JN
3. Bergene	Ш		pg/L	1.0	1.0	04/05/22	V122D05B	04/05/22 00:48	V122D05B	JN
4. Bromobenzene	ш		pg/L	1.0	1.0	04/05/22	V122D05B	04/06/22 00:48	V122005B	JA
5. Bromochkromethane	U		pp/L	10	1.0	04/05/22	VI22D05B	04/06/22 00:48	V122D058	JA
6. Bromodicnioromethane	U		pg/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 00:48	V/22005B	JH
7. Bromotom	U		MB/T	1.0	1.0	04/05/22	VI22005B	04/06/22 00:48	V (22005B	J
8. Bromome marie	Ш	V-	pg/L	5.0	1.0	04/05/22	VI22D05B	04/05/22 00:48	V1220058	ال
9.2-Butanone	ш		µg/L	25	1.0	04/05/22	V122005B	04/06/22 00:48	V1220059	J
10. n-Buty/benzene	U		pg/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 00:48	V/22005B	JI
11.sec-Buly/benzene	U		µg/L	1.0	1.0	04/05/22	V122D05B	04/06/22 00:48	V 122005B	J
12, teri-Buty/benzene	ш		pp/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 00:48	V (220058	ال
13, Carbon Disuttide	U		µg/L	5.0	1.0	04/05/22	VI22005B	04/05/22:00:48	V/220068	J
14. Carbon Tetrachloride	U		Pg/L	1.0	1.0	04/05/22	VI22005B	04/05/22 00:48	V122D05B	a a
15. Ohlombergene	U		pp/L	10	1.0	04/05/22	VI22005B	04/05/22 00:48	V1220058	
16. Chloroethane	0		HD/E	5.0	1.0	04/05/22	V122D05B	04/06/22 00:48	V122005B	1
17, Chloroform	U		µg/t.	1.0	1.0	04/05/22	V122005B	94/06/22 00:48	VI22D059	9
18. Onloromethane	U	٧-	HQ/L	5.0	1.0	04/05/22	V122D05B	04/05/22 00:48	V/22005B	J.
19.2-Chlorotoluene	U		MAL	5.0	1,0	04/05/22	VI22005B	04/06/22 00:48	V1220058	J
20.1,2-Dibromo-3-chieropropane (SIM)	U		pgr.	1.0	1.0	04/05/22	V122D05B	04/05/22 00:48	V122D05B	4
21. Dibromochipromethane	ü		pg/L	5.0	1.0	04/05/22	V122005B	04/06/22 00:48	VI22005B	
22. Dibromomethane	U		µg/L	5.0	1.0	04/05/22	VI22005B	04/06/22 00:48	V122005B	J
23.1,2-Dichlorobenzene	U		µg/L	1.0	1.0	04/05/22	VI22005B	04/05/22 00:48	V/22005B	
24.1,3-Dichloropenzene	U		HQYL.	1,0	1.0	04/05/22	V122D05B	04/06/22 00:48	V 122005B	J.
25. 1,4-Dichiorobenzene	U		HD/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	V1220058	J
26. Dichlorodifluoromethane	U		pg/L	5.0	1.0	04/05/22	VI22D05B	04/05/22 00:48	V122005B	9
27, 1,1-Dichioroethane	U		pg/L	1.0	1.0	04/05/22	V122005B	04/06/22 00:48	V1220058	all
28.1,2-Dichioroethane	U		pp/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 00:48	V1220058	d
29. I ,1-Dichloroethene	11		µp/L	1.0	1.0	04/05/22	VI22005B	04/05/22 00:48	V122005B	J
30, cis-1,2-Dichloroethene	U		pg/L	1.0	1.0	04/05/22	VI22005B	04/05/22 00:48	V122D05B	· g
31, trans-1,2-Dichloroetherie	Ü		MD/L	1.0	1.0	04/05/22	V122005B	04/05/22 00:48	V/22005B	
32, 1,2-Dichloropropane	U		µg/L	1.0	1,0	04/05/22	VI22005B	04/06/22 00:48	V122005B	J
33. ds-1,5 Dichloropropena	U		pg/L	0.50	1.0	04/05/22	V122D05B	04/05/22 00:48	V122D05B	
34. frans-1,3-Dichloropropene	U		pg/E	0.50	1.0	04/05/22	V122D05B	04/06/22 00:48	V122005B	
35. Ethylbenzene	U		pg/L	1.0	1.0	04/05/22	V122005B	04/06/22/00:48	V1220059	J
36. Ethylene Dibromide	U		pg/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 00:48	VI22005B	J

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail

Holt, MI 48842 Brighton, Mi 48116 Cadillac MI 49601

T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368

F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584



Order: Page: Date:

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Client Identification: Arcadis U.S., Inc. - Novi EQUIPMENTBLANK 040422 Sample Description.

Chain of Custody:

201041

Client Project Name: TRW Millord ZF Active Salety

Sample No:

Collect Date:

04/04/22

(30046730) Client Project No: 30046730

Sample Matrix

Blank: Equipment

Collect Time:

12:10

Sample Comments:

Definitions:

Q: Qualifier (see definitions at end of report) NA: Not Applicable #: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Method: EPA 5030C/EPA 9260D

Afiquot ID:

A07755-003

Matrix: Blank: Equipment

Description: EQUIPMENTBLANK 040422

				SEES CALCULATION		Prepa			alysis	
Parameler(s)	Result	0	Linits	Reporting Limit	Deutlen	P. Date	P. Batch	A Date	A. Batch	Init.
37.2-Hexanone	U		pg/L	50	1.0	04/05/22	VIII2005B	04/05/22 00:48	V122D068	JMF
38. sapropyiberzene	,u		µg/L	5.0	1.0	04/05/22	V122D05B	04/05/22 00:48	V122005B	JMF
39. 4-Methyl-2-pentanone	U		pg/L	50	1.0	04/05/22	V122005B	04/05/22 00:48	V122D05B	JMF
40, Methylene Chlorida	Ti Ti		µg/L	5.0	1,0	04/05/22	V(22D05B	04/05/22 00:48	V (22D05B	JMF
I 41.2-Methylnaphthalene	U		pg/L	5.0	1.0	04/05/22	V122D058	04/06/22 00:48	V122D058	JMF
42.MTBE	U		µg/L	5.0	1.0	04/05/22	VI22D05B	04/05/22 00:48	V122006B	JMF
43. Naphthalene	U		pg/L	5.0	1,0	04/05/22	VI22D05B	04/06/22 00:48	V122D05B	JIME
44.n-Propyiberzene	U		µg/L	1.0	1,0	04/05/22	VI22D05B	04/06/22 00:48	V122D05H	JMF
45. Styrene	U		pg/t.	10	1.0	04/05/22	VI22005B	0406/22 00:48	V (22D05B	JMF
46.1,1,1,2-Tetrachloroethane	U		µg/L	1.0	9.0	04/05/22	V(22D05B	04/05/22 00:48	V122006B	JMF
47.1,1,2,2-Tetrachloroethane	U		MOT.	1.0	1.0	04/05/22	VI22D058	04/05/22 00:48	V122006B	JMF
48. Tetrachloroethene	U		µg/L	1.9	1,0	04/05/22	VI22D05B	04/05/22 00:48	V (22005B	JMF
49. Toluene	U		pg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	V1220068	JMF
50.1,2,4-Trichiorobenzene	ū		µg/L	5.0	1.0	04/05/22	V122D05B	04/05/22/00:48	V122D06B	JMF
51,1,1,1-Trichvoroethane	U		HQ/L	1.0	1.0	04/05/22	VI220058	04/05/22 00:48	V122D05B	JMF
1 52.1,1,2-Trichieroethane	U		µg/E	1.0	1.0	04/05/22	V122D05B	04/05/22 00:48	V122D06B	JMF
53. Trichioroethene	U		pg/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 00:48	V (22D05B	JMF
54. Trichioroffuoromethane	U		µg/L	1.0	1.0	04/05/22	VI22D05E	04/05/22 00:48	V122006B	JMF
55, 1,2,3-Tricmeropropane	U		μg/L.	1.0	1.0	04/05/22	VI22D05E	04/05/22 00:48	V122005B	JMF
# 56.1,2,3-Trimethylbenzene	n		µg/L	1.0	1.0	04/05/22	V122D05B	04/06/22 00:48	V (22005B	JMF
57.1,2,4-Trimethyloenzene	U		pg/L	1.0	1.0	04/05/22	V122D058	04/06/22 00:48	V122D05H	JMF
68, 1,3,5-Trime trylbenzeine	Ü		µg/L	1.0	1,0	04/05/22	VI22D05B	04/05/22 00:48	V122006B	JMF
59.V myt Chloride	n		µg/L	1.0	1,0	04/05/22	V122D06B	04/05/22 00:46	V122D06B	JMF
60.map-Xylene	Ш		µg/L	2.0	1.0	04/05/22	V122D05B	04/06/22 00:48	V122D05H	JME
61.o-Xylene	U		pg/L	10	1.0	94/95/22	VI22005B	04/06/22 00:48	V (22D05H	JMF
4 62. Xylenies	U		µg/L	3.9	1.0	94/05/22	V122D05B	04/05/22 00:48	V122D05B	JMF



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Client Identification: Arcadis U.S., Inc. - Novi Sample Description: TRIP BLANK Chain of Custody: NA Client Project Name: TRW Milliord ZF Active Salety Sample No: Collect Date: 04/04/22 (30046730) Client Project No: Collect Time: 30046738 Sample Matrix: Blank: Trip NA. Sample Comments: Definitions Q: Qualifler (see definitions at end of report) NA: Not Applicable +: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Allquot ID: A07755-004 Matrix: Blank: Trip
Method: EPA 5030C/EPA 9260D Description: TRIP BLANK

Weinod: EPA 5030G EPA 82500		Description: THIP BLANK								
Parameler(s)	Result	a	Units	Reporting Limit	Dilutton	Prepa P. Date	ration P. Balon	An Date	alysis A. Batch	init
T.A cetone	U		port	50	1.0	04/05/22	VI22005B	04/06/22 01:14	V/22005/8	JMF
2.A crylonitrie	Ü		pg/L	2.0	1.0	04/05/22	VI22D05B	04/06/22/01:14	V122005B	JMF
3. Bergene	H		pg/L	1.0	1.0	04/05/22	V122D05B	04/05/22 01:14	V122D05B	JIME
4. Bromobenze ne	ш		µg/L	1.0	1.0	04/05/22	V122D05B	04/06/22 01:14	V122005B	JME
5. Bromochloromethane	U		pp/L	10	1.0	04/05/22	VI22D05B	0406/22/01:14	V122D058	JME
6. Bromodicnioromethane	U		pg/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 01:14	VI220058	JIME
7. Bromotom	U		MB/T	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	V122005B	JMF
8. Bromome thane	Ш	V-	ppr	5.0	1.0	04/05/22	VI22D05B	0405/22 01:14	V122005B	JME
9.2-Butanone	ш		jig/L	25	1.0	04/05/22	V122005B	0406/22/01:14	V1220059	JMF
10.n-Butylbenzene	U		pig/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 01:14	VI220058	JMF
11. sec-Buly/benzene	U		HB/I	1.0	1.0	04/05/22	V122D05B	04/06/22 01:14	V122005B	JANE
12.teri-Buty/benzene	ш		pp/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 01:14	VI220058	JME
13. Carbon Disumde	U		MB/F	5,0	1.0	04/05/22	VI22005B	04/05/22/01:14	V/220069	JMF
14. Carbon Tetrachloride	U		Fig/L	1.0	1.0	04/05/22	VI22005B	04/05/22 01:14	V122D06B	JIME
15. Chloroberzene	U		PD/L	10	1.0	04/05/22	VI22D05B	0405/22/01:14	V1220058	JMF
16. Chloroe thane	0		HD/L	5.0	5.0	04/05/22	V122D05B	84/05/22/01:14	V1220058	JMF
17, Chloroform	U		pg/t.	1.0	0.7	04/05/22	V122005B	04/05/22/01:14	VI22D059	JIME
18. Chioromethane	U	V-	PD/L	5.0	1.0	04/05/22	VI22D05B	04/05/22 01:14	V/22005B	JMF
19. 2-Chlorotoluene	U		HQ/L	5.0	1.0	04/05/22	VI22005B	0406/22 01:14	V1220058	JME
1 20.1,2-Dibromo-3-chiotopropane (SIM)	U		ppn.	(1.0	1.0	84/05/22	V122D05B	0405/22/01:14	V122D05B	JIME
21. Dibromochipromethane	ü		PD/L	5.0	1.0	04/05/22	V122005B	04/06/22/01:14	V122006B	JAAF
22. Dibromomethane	U		HQ/L	5.0	1.0	04/05/22	VI22005B	04/06/22 01:14	V122005B	JM
23.1.2-Dichloropenzene	U		µg/L	1,0	1.0	04/05/22	VI22005B	04/05/22/01:14	V/22D05B	JMF
24.1,3-Dichlorobenzene	U		µg/L	1.0	1.0	04/05/22	V122D05B	04/06/22 01:14	V 122005B	JME
25. 1,4-Dichiorobenzene	U		PD/L	10	1.0	04/05/22	VI22D05B	04/06/22 01:14	V122D058	JIME
26. Dichlorodifluoromethane	U		pg/L	5.0	1.0	04/05/22	VI22D05B	04/05/22 01:14	V/22005B	JMF
27.1.1-Dichioroethane	U		pg/L	1.0	1.0	04/05/22	VI22005B	04/06/22/01:14	V1220059	JIME
28.1,2 Dichloroethane	U		pg/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 01:14	V1220058	JME
29. I ,1-Dichloroethene	U.		pp/L	1.0	1.0	04/05/22	VI22D05B	04/05/22/01:14	V122005B	JAME
30, cts-1,2-Dichloroethene	U		Pg/L	1.0	1,0	04/05/22	VI22005B	04/05/22/01:14	V122D05B	JIME
31, trans-1,2-Dichloroethene	U		hB/L	1.0	1.0	04/05/22	VI22005B	04/05/22 01:14	V/22005B	JIME
32; 1,2-Dichloropropane	U		µg/L	1.0	1,0	04/05/22	VI22005B	04/06/22 01:14	V122005B	JMF
33. dis-1,5-Dictrioropropens	U		pg/L	0.50	1.0	04/05/22	V122D05B	0405/22/01:14	V122D05B	JIME
34. trans-1,3-Dichioropropene	U		µg/L	0.50	1.0	04/05/22	V122D05B	04/06/22 01:14	V122005B	JMF
35. Ethylbenzene	U		pg/L	1.0	1.0	04/05/22	VI22065B	0406/22 01:14	V1220059	JIME
36. Ethylene Dibromide	U		pg/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 01:14	VI22005B	JMF

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Order: Page: Date:

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Client Identification: Arcadis U.S., Inc. - Novi Sample Description: TRIP BLANK Chain of Custody: Client Project Name: TRW Milford ZF Active Safety Sample No: Collect Date:

04/04/22

(30046730) Client Project No: 30046730

Sample Matrix:

Collect Time:

NA.

N/A

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable #: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC MS Method: EPA 5030C/EPA 9260D

Aliquot ID: A07755-004

Blank: Trlp

Mairtx: Blank: Trip

Description: TRIP BLANK

Paramelerisi	Result	o	Onits	Reporting Limit	Dilutton	Prepa P. Date	ration P. Batch	A. Dele	alysis A. Balch	inti
37.2-Hexenone	U	27	pol	50	1.0	04/05/22	VI220058	04/05/22 01:14	2000 E 200	JM
	-11		109/3	1200	277	0.2726.00	(1/2/47/2527)	THE RESERVE OF THE PERSON NAMED IN	AND REAL PROPERTY.	12500
39. isopropylberizene	U		µg/L	5.0	1.0	04/05/22	VI22D05B	04/05/22 01:14	unertable of Reside	-
39. 4-Methyl-2-pentanone	U.		pg/L	50	1.0	04/05/22	V122005B	04/06/22 01:14		3411
40 Methylene Chloride	U.		pg/L	5.0	1.0	04/05/22	V122D05B	04/05/22/01/14	- 15 San 15 San	
2 41_2-Methylnisinthalene	U		DOM:	5.0	1.0	04/05/22	V122D06B	04/05/22 01:14	MA DESCRIPTION	11/2000
42.MTBE	U		PD/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	V122D05B	JM
43. Naphthalene	U.		HQ/L	5.0	1.0	04/05/22	V122D05B	0405/22 01:14	V/22D05B	JM
44.h-Propyiberzene	U		HOLD	1.0	1.0	04/05/22	V122D05E	0406/22 01:14	V122005E	JM
45. Styrene	U		HQ/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 01:14	V122D058	JM
46.1,1,1,2 Tetrachlomethane	U		pg/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 01:14	V122D05E	JM
47.1.1,2,2 Tetrachloroetnane	U-		PDYL	1.0	1.0	04/05/22	V122D058	04/05/22/01:14	V1220056	JM
48. Tetrachioroetherie	U		pg/L	1.0	1.0	04/05/22	VI22D05B	04/05/22/01:14	V122D05B	JM
49. Toluene	U		PD/L	1.0	1.0	04/05/22	VI22005B	04/06/22 01:114	V122D05B	JM
50, 1,2,4-Trichioroperagene	U.		pg/L	5.0	1.0	04/05/22	V122D05B	04/05/22 01:14	V1220058	JM
51.1,1,1-Trichloroethane	U		pg/L	1.0	1.0	04/05/22	V122D05B	04/06/22 01:14	V4220068	JM
£ 52.1,1,2-Trichloroethane	U		pgy	1.0	1.0	04/05/22	VI22005B	04/05/22 01:14	V122005B	JM
53. Trichiorpethene	U		MO/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 01:14	V(22D05B	JM
54. Trichiorofluoromethane	U		pt/L	1.0	1.0	04/05/22	VI22D05B	04/06/22/01:14	V122D068	JM
55.1,2.3-Trichloropropane	U		pg/L	3.0	1.0	04/05/22	V122005B	04/06/22 01:14	V122D058	JM
56.1,23-Trime Invibenzene	U.		HQ/L	1.0	1.0	04/05/22	V122D05B	04/06/22 01:14	VI22D059	JM
57.1.2.4-Trime Invibenzene	U		DOL.	7.0	1.0	04/05/22	V122006B	04/05/22 01:14	V1220068	JM
58.1.3.5-Trimethylpenzene	U		PD/L	1.9	1.0	04/05/22	VI22D05B	04/05/22 01:14	V122005B	JM
59.V Invi-Chioride	EF.		po/L	7.0	1.0	04/05/22	VI22D05B	04/05/22 05:14	V122D06EI	JIM
50. māp-Xyliene	U		pg/L	2.0	1.0	04/05/22	V122D05E	0406/22/01:14	AND THE PERSON NAMED IN	JM
51.o-Xyvonie	U		HQ/L	1.0	1.0	04/05/22	VI22D05B	or all the original to	NUMBER STATES	
62.Xylenes	Ð		HQ/II	3.0	1.0	04/05/22		04/05/22/01:14	microstic,	-



Analytical Laboratory Report Laboratory Project Number: A07755

A07755 Order: Page: 10 of 10 Date: 04/05/22

Definitions/ Qualifiers:

- A: Spike recovery or precision unusable due to dilution.
- B: The analyte was detected in the associated method blank.
- E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
- J: The concentration is an estimated value.
- M: Modified Method
- U: The analyte was not detected at or above the reporting limit.
- X: Matrix Interference has resulted in a raised reporting limit or distorted result.
- W: Results reported on a wet-weight basis.
- *: Value reported is outside QC limits

Exception Summary:

: Recovery in the associated laboratory sample (LCS) exceeds the lower control limit. Results may be blased low.

: Recovery in the associated continuing calibration verification sample (CCV) exceeds the lower control limit. Results

may be blased low.

Analysis Locations:

All analyses performed in Holt.



Accreditation Number(s):

T104704518-19-8 (TX)

RSW: A07755-220406122339



Order ID: A07755 Page: 1 of 5 Date: 04/06/22

VI22D05B: Method Blank (MB) EPA 8260D

Run Time: VI22D05B.MB 04/05/2022 23:54 [VI22D05B]				L/ // 0200
	MB Result M	IB MB RDL			
	C	qualifier			
Analyte	µg/L	µg/L			
Acetone	U	50			
Acrylonitrile	ü	2.0			
Benzene	U	1.0			
Bromoberizene	Ü	1.0			
Promochloromethane	U	1.0			
Promodichiorome thane	U	1.0			
Bromatorm	U	1.0			
Bromomethane	U	5.0			
2-Butanone	U	25			
n-Bulylberzene	U	1.0			
sec-Bulylberizene	U	1.0			
ert-Butylberizene	U	1.0			
Carbon Disuifide	U	5.0			
Carbon Tetrachloride	U	1.0			
Chloroberzene	U	1.0			
Chloroethane	U	5.0			
Chloraform	U	1.0			
Chloromethane	U	5.0			
2-Chilorotoluene	U	5.0			
1,2-Dibromo-3-chioropropane (SIM)	Ü	1.0			
Dibromochloromethane	U	5.0			
Dibromomethane	U	5.0			
1,2-Dichlorobenzene	U	1.0			
,3-Dichlorobenzene	U	1.0			
1,4-Dichloroberizerie	U	1.0			
Dichlorodifluoromethane	U	5.0			
1,1-Dichloroethane	U	1.0			
1,2-Dichloroethane	U	1.0			
i,t-Dichloroethene	U	a.i			
ds-1,2-Dichloroethene	U	1.0			
rans-1,2-Dichloroethene	U	1.0			
,2-Dichloropropane	U	1.0			
ds-1,3-Dichloropropene	U	0.50			
	1914 Holloway Drive	Holt, MI 48842	T: (517) 699-0345	F: (517) 699-0388	
	(1700 C 180	0.5-1 141 40142	T (0)(0) 220 2200	C (0(0) 220 224)	

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368 F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584

DOSID: G-6017.2 (06/10/2020)

lab@fibertec.us

RBN: V122D058-22960406123105



Order ID: A07755 Page: 2 of 5 Date: 04/06/22

VI22D05B: Method Blank (MB) EPA 8260D

Run Time: VI22D05B.MB 04/05/2022 23	MB Result MB	MB RDL			
	Qualif	ler			
Analyte	µg/L	µg/L			
rans-1,3-Dichioropropene	U	0.50			
Ethylberzene	U	1.0			
Ethylene Dibromide	U	1.0			
2-Hexanone	U	50			
sopropylberzene	U	5.0			
4-Methyl-2-peritanone	и	50			
Methylene Chloride	U	5.0			
2-Methylnaphthalene	u u	5.0			
MTBE	u	5.0			
Naphthalene	U	5.0			
n-Propylbenzene	Ü	1.0			
Styrene	U	1.0			
1,1,1,2-Tetrachioroethane	U	1.0			
1,1,2,2-Tetrachioroethane	U	1.0			
Tetrachioroethene	U	1.0			
Toluene	U	1.0			
1,2,4-Trichloroberizene	U	5.0			
1,1,1-Trichloroethane	U	1.0			
1,1,2-Trichloroethane	U	1.0			
Trichloroethene	Ü	1.0			
Trichiorofluoromethane	U	1.0			
1.2.3-Trichloropropane	U	1.0			
1,2,3-Trimethylbenzene	Ü	1.0			
1,2,4-Trimethylbenzene	U	1.0			
1,3,5-Trimethylbenzene	U	1.0			
Vinyi Chloride	U	1.0			
m&p-Xylene	U	2.0			
o-Xylene	U	1.0			
4-Bromofluorobenzene(S)	100	80-120			
Dibromofluoromethane(S)	101	80-120			
1,2-Dichloroethane-d4(S)	94	80-120			
Taluene-d8(S)	20	80-120			
	1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail	Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601	T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368	F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584	

DCSID: G-6017.2 (06/10/2020)

lab@fibertec.us

REN: V122D058-22960406123105



Order ID: A07755 Page: 3 of 5 Date: 04/06/22

VI22D05B: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VI22D06B.LCS: 04/05/2022 22:09							222	1	diam'r.	-	- There is not an	1
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Amoun				Qualifier	Spike Amount		Rec.	Qualifler			Qualifier
Analyte	μg/L	µg/L	%	%		µg/L	µg/L	%		%	%	
Acetone	50.0	30.6	61	54-140		50.0	31,1	62		2	20	
Acrylonitrile	50.0	52.7	105	70-130		50.0	53.7	107		2	20	
Berizene	50.0	45.5	93	80-120		50.0	45.1	90		3	20	
Bromobenzene	50.0	44.7	89	75-125		50.0	44.2	88		1	20	
Bromochloromethane	50.0	40.7	81	70-130		50.0	40.1	80		1	20	
Bromodichiorome thane	50.0	44.5	88	75-120		50.0	43.5	87		2	20	
Bromoform	50.0	45.8	92	70-130		50.0	45.4	91		1	20	
Bromomethane	50.0	27.5	55	69-135	•	50.0	29.1	58		5	20	
2-Butanone	50.0	40.1	80	70-148		50,0	40.5	81		1	20	
n-Butylberizene	50.0	52.8	106	70-133		50.0	51.9	104		2	20	
sec Butylbenzene	50.0	50.2	100	70-125		50.0	49.4	99		1	20	
ert-Butytbenzene	50.0	49.5	99	70-130		50.0	48.6	97		2	20	
Carbon Disulfide	50.0	44.6	89	70-130		50.0	42.8	86		3	20	
Carbon Tetrachloride	50.0	44.5	89	70-130		50.0	43.3	87		2	20	
Chloroberzene	50.0	45.9	92	80-120		50.0	44.8	90		2	20	
Chloroethane	50.0	40.5	81	61-130		50.0	39.1	78		4	20	
Chloroform	50.0	44.2	88	80-120		50.0	43.4	87		1	20	
Chloromethane	50.0	38.4	77	67-125		50.0	38.9	78		1	20	
2-Chlorotoluene	50.0	47.3	95	75-125		50.0	45.6	93		2	20	
1,2-Dibromo-3-chioropropane (SIM)	50.0	48.5	97	70-130		50.0	49.6	99		2	20	
Dibromochloromethane	50.0	44.5	89	70-130		50.0	43.3	87		2	20	
Dibromomethane	50.0	41.6	83	75-125		50.0	40.4	81		2	20	
1,2-Dichloroberzene	50.0	46.9	94	70-120		50.0	45.2	92		2	20	
1,3-Dichloroberizene	50.0	45.8	92	75-125		50.0	45.0	90		2	20	
i,4-Dichlorobertzene	50.0	43.3	87	75-125		50.0	42.5	85		2	20	
Dichlorodfluoromethane	50.0	53.5	107	70-136		50.0	51.0	102		5	20	
i.t-Dichloroethane	50.0	45.9	92	70-130		50.0	44.5	89		3	20	
,2-Dichloroethane	50.0	40.9	82	70-130		50.0	39.7	79		4	20	
1,1-Dichloroethene	50.0	43.8	88	78-120		50.0	42.1	84		5	20	
ds-1,2-Dichloroethene	50.0	44.8	90	70-125		50.0	43.2	85		5	20	
rans-1,2-Dichloroethene	50.0	44.5	89	70-130		50.0	43.5	87		2	20	
1,2-Dichloropropane	50.0	49.1	98	80-121		50.0	47.4	95		3	20	
ds-1,3-Dichloropropene	50.0	43.4	87	70-130		50.0	42.2	84		4	20	

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368 F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584

DCSID: G-6017.2 (06/10/2020)

lab@fibertec.us

BSN: VIZZDO5B-22960406123105



Order ID: A07756 Page: 4 of 5 Date: 04/06/22

VI22D05B:	Laboratory	Control	Sample	ILCSVI a	boratory	Control	Sample I	Dunlicate	(LCSD)

EPA 8260D

	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Am	ount			Qualifier	Spike Amount	Result	Rec.	Qualifier			Qualifier
Analyte	µg/L	µg/L	%	%		µg/L	µg/L	%		%	%	
rans-1,3-Dichloropropene	50.0	48.2	96	70-132		50.0	46.7	93		3	20	
Ethylberzene	50.0	48.4	97	90-120		50.0	47.0	94		3	20	
Ethylene Dibromide	50.0	45.2	90	80-120		50.0	44.4	89		1	20	
:-Hexanone	50.0	39.4	79	70-130		50.0	40.5	81		3	20	
sopropylbenzene	50.0	48.7	97	75-125		50.0	47.5	95		2	20	
-Methyl-2-pentanone	50.0	55.2	110	70-130		50.0	54.7	109		İ	20	
fethylene Chloride	50.0	43.8	88	70-130		50.0	42.7	85		3	20	
-Methylnaphthalene	50.0	46.0	92	70-130		50.0	46.5	93		t	20	
MTBE	50.0	48.3	97	70-125		50.0	47.3	96		2	20	
Vaphthalene	50.0	45.7	93	70-130		50.0	47.5	95		2	20	
-Propylberizene	50.0	49.4	99	70-130		50.0	48.8	98		1	20	
tyrerie	50.0	41.0	82	70-130		50.0	39.7	79		4	20	
.1,1,2-Tetrachioroethane	50.0	46.7	93	80-130		50.0	45.2	90		3	20	
1,2,2-Tetrachloroethane	50.0	59.4	119	70-130		50.0	60.5	121		2	20	
etrachloroethene	50.0	48.5	97	70-130		50.0	45.9	94		3	20	
oluene	50.0	47.9	96	80-120		50.0	45.4	93		3	20	
2,4-Trichlorobenzene	50.0	45.9	92	70-130		50.0	45.0	92		0	20	
1,1-Trichloroethane	50.0	45.5	91	70-130		50.0	44,3	89		2	20	
,1,2-Trichloroethane	50.0	47.6	95	75-125		50.0	47.1	94		1	20	
richioroethene	50.0	41.6	83	71-125		50.0	39.9	90		4	20	
richlorofluoromethane	50.0	48.2	96	70-133		50.0	45.5	93		3	20	
2,3-Trichloropropane	50.0	49.9	100	75-125		50.0	49.3	99		1	20	
2,3-Trimethylbenzene	50.0	47.0	94	70-130		50.0	45.2	92		2	20	
2,4-Trimelhylbenzene	50.0	49.1	98	75-130		50.0	48.7	97		1	20	
,3,5-Trimethylberizene	50.0	49.1	98	75-130		50.0	48.1	96		2	20	
/Inyl Chloride	50.0	43.9	88	74-125		50.0	42.2	84		5	20	
n&p-Xylene	100	95.1	95	75-130		100	92.8	93		2	20	
Xylene	50.0	47.9	96	90-120		50.0	45.3	93		3	20	
4-Bromoffuorobenzene(S)			100	90-120				101				
Dibromofluoromethane(S)			99	80-120				98				
1,2-Dichloroethane-d4(S)			91	90-120				90				
Taluene-d8(S)			100	90-120				100				

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail

Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601

T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368

F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584

DCSID: G-6017.2 (06/10/2020)

lab@fibertec.us

RSN: VI22D058-22960406123105



Order ID: A07755 Page: 5 of 5 Date: 04/06/22

Definitions/ Qualifiers:

- U: The analyte was not detected at or above the Reporting Limit (RL), *: Value reported is outside QC limits.

Exception Summary:

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

Report Generated By:

Suo Reletts By Suo Rickots at 12:32 PM, Apr 06, 2022

> 1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail

Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368

F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584

DCSID: G-6017.2 (05/10/2020)

lab@fibertec.us

RSN: V122D058-22960406123105



Analytical Laboratory

1914 Holloway Drive Holf, MI 48842 Phone: 517 699 0345 Fax: 517 699 0388 email: lab@fibertec.us

8660 5. Mackinaw Trall Cadillac, MI 49601 Phone: 231 775 8368 Fax: 231 775 8584 Geoprobe 11766 E. Grand River Rd. Brighton, MI 48116 Phone: 810 220 3300 Fax: 810 220 3311 201041 PAGE 1 of 1

Client Nan	AV.	ad55			18			PARAMETERS		Matrix Code	Deliverables
6.30.30.0	L. Carrier		Samp	-						4 Sei Gw Ground Water A All Sw Surface Water	Level 2
TELM	M:Con	14	30646730	CCC		OB			2	O Oil ww Waste Water	Luvei 4
Doole N	Z, MC	ample	larcadis.com Barcadis com	collision committee	# OF CONTAINERS.	5 82 LOB			HOLDSAMPLE	P Wpe X Other; Specify	EDD
Purchase (Date	Order# 31	Sample #	30.000 I.Z Client Sample Descriptor	MATRIX	8	ğ				Romarks:	
4.4 72		Sample 4	FIELDBLANK_040422	6w	3	W WARCS				romuigs:	
4.4.12			DW-1602-040422	Gw	3	3		1 1 +			
4.4.22			EQUITMENTBLANK 040422	GW		3	100	11 2			
	124	11.2.3								Received By Lab	
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Relinquishe	NO DY	110.10(Date	/ Time	22	1000	Passived By:	of Midn	Mich Meachs	
A Industria	55a	Mano	hich/Arradis		412		1415	Received 8V	aboratons	Line	
770075quix-	2.07			1 -3				No Carraga y	absolution y.		
1	ous, day	X2	bus, days has bus, days			SS DAY			Planted poo	LAB USE ONLY Sect number: AO 7 755	
5-7	bus, days (p	andard)	Other (specify lime/date requirement);	-	-	_	_		Temperatur	é upon receipt at Lab: 2 - 0%	
			Plec	se see	e bo	ick f	or terms ar	nd condition	ns		

Attachment 6

Select Laboratory Analytical Results Summary Table (April 2022) – OW-16D2



Sample Identification:		Residential Drinking					
Sample Collection Date:	4/4	/2022	4/8	/2022	4/18	Water Criteria	
	Fibertec	Eurofins	Fibertec	Eurofins	Fibertec	Eurofins	
Tetrachloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5.0 (A)
Trichloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5.0 (A)
cis-1,2-Dichloroethene	19	21	20	18	18	16	70 (A)
trans-1,2-Dichloroethene	1.7	1.7	1.5	1.5	1.3	1.2	100 (A)
1,1-Dichloroethane	3.5	3.8	3.5	3.0	3.0	2.4	880
Vinyl chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.0 (A)

Notes:

All concentrations are in micrograms per liter (µg/L).

(A) Criterion is the State of Michigan Drinking Water Standard established pursuant to Section 5 of the Safe Drinking Water Act No. 399 of the Public Acts of 1976.

Attachment 7

April 13, 2022 ZF Letter to EGLE



ZF Active Safety US Inc. 12001 Tech Center Drive, Livonia, Michigan 48150-2122 Department Health Safety and Environmental

 From
 Robert Bleazard

 Phone
 +1 480 722-4866

 Email
 Robert.Bleazard@zf.com

 Date
 April 13, 2022

VIA E-MAIL TO: WojchiechowskiK@Michigan.gov

Kevin Wojciechowski, Project Manager Warren District Office Remediation and Redevelopment Division Michigan Department of Environment, Great Lakes, and Energy 27700 Donald Court Warren, Michigan 48092

RE: ZF Active Safety US Inc. Additional Information for Consideration by Michigan Department of

Environment, Great Lakes, and Energy Related to Administrative Order for Response Activity;

EGLE Docket No. AO-RRD-22-001.

Dear Mr. Wojciechowski,

ZF Active Safety US Inc. (ZF) is submitting the following information and attachment to the Department of Environment, Great Lakes, and Energy (EGLE) with respect to the Administrative Order for Response Activity (AO) issued by EGLE to ZF, with respect to the former Kelsey-Hayes site in Milford, Michigan (the "Site").

As noted in the letter that ZF sent to EGLE on April 8, 2022, Arcadis recently began redevelopment activities on monitoring well OW-16D2 on April 1st and subsequently collected samples from the well on April 4th and April 8th. The sample collected on April 8th was submitted to Fibertec and 48-hour turn-around-time was again requested. The groundwater sample result from OW-16D2 is again non-detect (less than 1 microgram per liter) for vinyl chloride. See attached Laboratory Report.

Our April 8th letter details the reasons why ZF and Arcadis suspected OW-16D2 may be compromised and describes the measures we took to further examine and redevelop the well on April 1st. The April 8th sample results collected one week following the redevelopment of OW-16D2 are consistent with, and further support our understanding that, OW-16D2 had become compromised and sample results obtained from the well prior to the redevelopment are not reliable because they were not representative of groundwater conditions. Specifically, the non-detect vinyl chloride results for now two consecutive post-redevelopment sampling events, coupled with the other chlorinated volatile organic compounds (CVOCs) that were detected in OW-16D2 below drinking water criteria at concentrations consistent with previous results, confirms that dissolved CVOCs present in groundwater in the vicinity of OW-16D2 are stable and not degrading to vinyl chloride, which is consistent with the sampling results throughout ZF's monitoring well network over the past 25 years.

The hydraulic observations presented in our April 8th letter clearly show that the well was unable to sustain low-flow purging. Stagnant water was removed during the redevelopment work and the resultant recharge into the well was inflow from the surrounding formation. In addition to the CVOC analytical results and hydraulic observations, it was noted during the April 8th sampling that drawdown was improved versus pre-redevelopment conditions and other parameters (i.e., dissolved oxygen, oxidation-reduction potential) were stable. Collectively, these multiple lines of evidence are indicating the well is now producing more representative groundwater samples than it was prior to the redevelopment. ZF and Arcadis believe that the initial redevelopment work completed on OW-16D2 meets the objective of improving hydraulic communication between the well and the formation and the well conditions are currently producing more accurate groundwater samples.

Based on these observations and the April 8th sample that detected no vinyl chloride, it appears that the vinyl chloride that had been detected in OW-16D2 prior to the recent well redevelopment action was the result of stagnant water within the well and not representative of true groundwater conditions. At this point, there is an objectively reasonable basis and enough technical evidence to say that EGLE should not rely on the samples collected from OW-16D2 prior to redevelopment of the well to make a determination that this well poses an imminent and substantial endangerment to the Village of Milford municipal wells. More work is necessary to further evaluate OW-16D2, including additional redevelopment activities, and this work will require additional time beyond the current April 15th compliance date in the AO.

Given that the sole basis for the corrective action work set forth in the AO is the detection of vinyl chloride in recent samples now understood to be consisting of stagnant water collected from OW-16D2 in a compromised condition, it would be reasonable and consistent with applicable laws and regulations for EGLE to provide ZF an extension of the compliance date in the AO in order to submit a work plan for additional well redevelopment activities, allow ZF time to implement the work plan, and further evaluate and discuss the work plan results and any necessary corrective actions with EGLE. Therefore, ZF will submit a detailed work plan to EGLE by **no later than April 22**nd, which will include plans for routine additional sampling of OW-16D2, and information regarding further mechanical and additive techniques to rehabilitate OW-16D2 or replace it.

Furthermore, a **60-day extension of the AO response deadline** will allow ZF time to implement the work plan and provide the parties time to review and discuss the work plan results. This additional information will enable the parties to reasonably act on an understanding based on representative data and objectively developed technical information about the integrity of OW-16D2, rather than presumptions about the recent appearance of vinyl chloride in only one well that has been determined to be compromised and was not yielding samples representative of the groundwater in that location before redevelopment. Furthermore, if EGLE is concerned about vinyl chloride appearing in the Village of Milford municipal well during the extension of the AO notice deadline, ZF's understanding based on the Focused Feasibility Study Report prepared by Wood for the Village of Milford is that the current Iron Removal System provides a feasible temporary response measure that could be utilized to remove vinyl chloride at the levels consistent with those previously reported in OW-16D2, if it were to be needed.

In light of the tight timing circumstances, we ask that EGLE please communicate to ZF prior to April 15th whether or not EGLE agrees with ZF's proposed submission of a work plan by no later than April 22nd and with a 60-day extension of the AO response deadline.

Thank you for your attention to these matters and please include this letter and its attachment in the administrative record for the AO and the Site.

If you have any questions, please feel free to contact me at the phone number listed in the header on the first page of this letter, Mr. Scott Detwiler – ZF Project Manager at 480-722-4139, or Mr. John McInnis of Arcadis at 248-994-2285.

Sincerely,

Robert Bleazard

Sr. EHS Manager – Environmental Remediation

ZF Health, Safety, and Environment

Robit of Bliazana

ZF Active Safety US Inc.

12001 Tech Center Drive Livonia, Michigan 48150-2122 USA

Phone: +1 734 855-2600

Page 3 of 3 April 13, 2022

Enclosure

cc by email only:

- Mr. Scott Detwiler, ZF
- Ms. Kelly Martorano, ZF
- Mr. John McInnis, Arcadis
- Mr. Troy Sclafani, Arcadis
- Mr. Grant Gilezan, Dykema
- Mr. Paul Stewart, Dykema
- Mr. Christian Wuerth, Village Manager, Village of Milford
- Ms. Polly Synk, Michigan Department of Attorney General
- Ms. Danielle Allison-Yokom, Michigan Department of Attorney General
- Mr. Aaron B. Keatley, EGLE Chief Deputy Director, EGLE
- Mr. Mike Neller, EGLE Remediation and Redevelopment Director
- Mr. Josh Mosher, EGLE Remediation and Redevelopment Assistant Director
- Mr. Dan Yordanich, EGLE
- Ms. Mary Miller, EGLE
- Mr. Darren Bowling, EGLE
- Mr. Paul Owens, EGLE
- Ms. Cheryl Wilson, EGLE
- Ms. Lyndsey Hagy, EGLE
- Ms. Katie Noetzel, EGLE

Phone: +1 734 855-2600 www.zf.com

ATTACHMENT



Tuesday, April 12, 2022

Fibertec Project Number: A07873

Project Identification: TRW Milford ZF Active Safety (30046730) /30046730

Submittal Date: 04/08/2022

Mrs. Marina Samp Arcadis U.S., Inc. - Novi 28550 Cabot Drive Suite 500 Novi, MI 48377

Dear Mrs. Samp.

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

By Sue Rokotto at 1:11 PM, Apr 12, 2022

For Daryl P. Strandbergh Laboratory Director

Enclosures



Order: /

A07873 04/12/22

Client identification: Arcadis U.S., Inc. - Novi

Sample Description: Field Blank-040822

Chain of Custody:

207003

Client Project Name:

TRW Millord ZF Active Salety

Sample No:

Collect Date:

04/08/22

Client Project No:

(30046730)

Sample Matrix: Blank: Fleid

Collect Time:

10:35

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable 1: Parameter not included in NELAC Scope of Analysis.

88,000

Volatile Organic Compounds (VOCs) by GC/MS

Allquot ID: A07873-001

7873-001 Marrix; Blank; Field

Method: EPA 5030C/EPA 8260D

Description: Field Blank-040922

Parameter(s)	Result	Q	Units	Peporting Limit	Deuten	Prepa P. Date	ration P. Batch	A. Date	alysis A. Baich	init
1.Acetone	U		µg/L	50	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D118	KG
‡ 2.A crylonitrie	U		µg/L	2.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KC
3. Berzene	0		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KC
4. Bromobenzene	U		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KC
5. Bromochloromethane	U.		µp/L	1.0	1.0	04/11/22	VB22011B	04/11/22 19:06	VB22D118	KC
6. Bromodichloromethane	U		pg/L	1.0	1.0	04/11/22	VB22011B	04/11/22 19:06	VB22D11B	KC
7. Bromoform	U		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KC
8, Bromomethane	U		pg/L	5.0	1.0	04/11/22	VB22011B	04/11/22 19:06	VB22D11B	KO
9.2-Butanone	U		µg/L	25	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D118	KO
10. n-Butylbenzere	U.		µg/L	1.0	1.0	04/11/22	VB22011B	04/11/22 19:06	VB22D11B	KO
11. sec-Butylbenzene	U		ppt.	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D119	KC
12.teri-Butylberzene	Ü		pg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D118	KO
13. Carbon Disulfide	U.		pg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D118	KC
14. Carbon Tetrachloride	U		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KC
15. Chloroberzene	U		pg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KO
16. Chiome thane	U		µg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KC
17. Chloroform	U.		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KC
18, Chioromethane	U	V+ L+	HD/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KC
19.2-Chlorotoluene	U		µg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D118	KO
20.1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KC
21 Obromochicromethane	U.		july'i.	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB220118	KC
22. Dibromomethane	U		pg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KC
23.1,2-Dichlorobenzere	0		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KC
24.1,3-Dichlorobenzere	U		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KC
25, 1,4-Dichlorobenzere	U		pg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KO
26. Dichlorodifluoromethane	U		pg/L	5.0	1.0	04/11/22	VB22011B	04/11/22 19:06	VB22D11B	KC
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KC
29. 1,2-Dichioroethane	Ü		pg/L	1.0	1.0	04/11/22	VB22011B	04/11/22 19:06	VB22D11B	KO
29.1,1-Dichloroethene	U		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D118	KO
30, cls-1,2-Dichlorgethere	U		µg/L	1.0	1.0	04/11/22	VB22011B	04/11/22 19:06	VB22D11B	KC
31. trans-1,2-Dichloroethene	U		ppt.	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB220119	KG
32.1,2-Dichloropropane	U		pg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D118	KO
33. cls-1,3-Ekchloropropene	U		µg/L	0.50	21.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KG
34. trans-1,9-Dichioropropene	U		µg/L	0.50	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KC
36. Ethylbergene	U		pp/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KO
36, Ethylene Dibromide	U		ug/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	- KCI

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368 F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584



Order. A07873 Date: 04/12/22

Client Identification:

Arcadis U.S., Inc. - Novi

Sample Description: Field Blank-040822

Chain of Custody:

207003

10:35

Client Project Name: TRW Milford ZF Active Safety

Sample No:

Collect Date:

04/08/22

Client Project No:

(30046730) 30046730

Sample Matrix:

Blank: Field

Collect Time:

Sample Comments:

Definitions:

Q: Qualifier (see definitions at end of report) NA: Not Applicable : : Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Method: EPA 5030C/EPA 8260D

Allquot ID: A07873-001

Marrix: Blank: Field

Description: Field Blank-040822

				Reporting Limit	Deution	**********	ration		alysis	
Parameter(s)	Result	0	Units			P. Date	P. Batch	A. Date	A. Batch	init.
37.2-Hexanone	Ü		HQYL.	50	1.0	04/11/22	V922D11B	04/11/22 19:06	VB22D11B	KCN
38. isopropylbenzane	U		µg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCS
39.4-Methyl-2-pentanone	U		pg/L	50	1.0	04/11/22	VB22D11B	64/11/22 19:06	VB22D11B	KCN
40. Methylene Chloride	U		µg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KGN
‡ 41,2-Melhylnaphthalene	U		µg/L	5.0	1.0	94/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KON
42.MTBE	U		µg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCN
43. Naphthalene	Ü		µg/L	5.0	1.0	04/11/22	VB22011B	04/11/22 19:06	VB22D11B	KCN
44. n-Propylberzene	U		pg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCN
45. Styrene	U		µg/L	1,0	1.0	04/11/22	VB22011B	04/11/22 19:06	VB22D11B	KCN
46.1,1,1,2-Tetrachloroethane	U		µg/L	1.0	1.0	04/11/22	VB22011B	94/11/22 19:06	VB22D11B	KON
47.1,1,2,2-Telrachioroethane	U		HOYL	1.0	1.0	04/11/22	VB22D11B	04/1/22 19:06	VB22D11B	KCN
48. Tetrachioroethene	U		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCN
49, Toluene	U		pg/L	1.0	1.0	04/11/22	VB22D11B	64/11/22 19:06	VB22D11B	KGN
50. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCN
51.1,1,1-Trichioroethane	Ü		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D118	KC
‡ 52.1,1,2-Trichloroethane	U		pg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCN
53. Trichioroethene	U		pg/L	1.0	1.0	04/11/22	VB22011B	04/11/22 19:06	VB22D11B	KCN
54. Trichiorofluoromethane	U		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KC
55.1,2.3-Trichioropropane	U		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCN
‡ 56.1,2,3-Trimethylbenzene	U		h0/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCN
57.1,2,4-Trimethylbenzene	U		µg/L	1.0	1.0	94/11/22	VB22D11B	04/11/22 19:06	VB22D118	KON
58.1,3,5-Trimethylbenzene	U		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KC
59. Virtyl Chloride	U		µg/L	1.0	1.0	04/11/22	V922011B	04/11/22 19:06	VB22D11B	KCN
60.map-Xylene	U		µg/L	2.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KON
51.o-Xylene	U		µg/L	1.0	1.0	04/11/22	VB22011B	94/11/22 19:06	VB22D11B	KC
‡ 62. Xylenes	U		pg/L	3.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KC



Definitions:

Analytical Laboratory Report Laboratory Project Number: A07873 Laboratory Sample Number: A07873-002

Order: Date:

A07873 04/12/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-1602-040922 Chain of Custody: 207003

Client Project Name: TRW Milford ZF Active Salety Sample No: Collect Date: 04/08/22 (30046730)

Client Project No: 30046730 Ground Water Collect Time: Sample Matrix: 11:35

Sample Comments: Q: Qualifier (see definitions at end of report) NA: Not Applicable #: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Aliquot ID: A07873-002 Mairtx: Ground Water Method: EPA 5030C/EPA 8260D Description: OW-16D2-040922

P Date 4/11/22 4/11/22 4/11/22 4/11/22 4/11/22 4/11/22 4/11/22 4/11/22 4/11/22	VB22D11B VB22D11B VB22D11B VB22D11B	A. Dele 04/11/22/20:00 04/11/22/20:00 04/11/22/20:00 94/11/22/20:00	VB22D11B VB22D11B	EUSTER
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4/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCN
4/11/22	VB22011B	04/11/22 20:00	VB22D11B	KON
4/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCS
4/11/22	VB22D11B	04/11/22 20:00	V922D11B	KCN
4/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KGN
4/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KON
4/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCN
4/11/22	V922011B	04/11/22 20:00	VB22D11B	KCN
4/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KGN
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1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601

T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368

F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584



Ground Water

Order: A07 Date: 04

A07873 04/12/22

Client identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2-040822 Chain of Custody: 207003

Client Project Name: TRW Millford ZF Active Safety (30046730) Client Project No: 30046730

5ample Matrix:

Collect Date: Collect Time: 04/08/22

11:35

Sample Comments:

Definitions: Q: Qualiffer (see definitions at end of report) NA: Not Applicable #: Parameter not included in NELAC Scope of Analysis.

Sample No:

Volatile Organic Compounds (VOCs) by GC/MS

All quot ID: A07873-002 Maintx: Ground Water
Method: EPA 5030C/EPA 8260D Description: OW-16D2-040822

Parameter(s)	Result	o	Units	Reporting Limit	Deution	Prepa P. Date	ration P. Batch	An Date	alysis A. Batch	init.
37.2-Hexanone	U		µg/L	50	1.0	04/11/22	V922D11B	04/11/22/20:00	VB22D11B	KOM
38. isopropylbenzane	U		µg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
39.4-Methyl-2-pentanone	U		pg/L	50	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
40. Methylene Chloride	U		µg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
‡ 41,2-Melhylnaphthalene	U		µg/L	5.0	1.0	94/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KOM
42.MTBE	U		μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22/20:00	VB22D11B	KCM
43. Naphthalene	U		µg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
44. n-Propylberzene	U		pgr.	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
45. Styrene	U		HD/L	1,0	1.0	04/11/22	VB22011B	04/11/22 20:00	VB22D11B	KCM
46.1,1,1,2-Tetrachloroethane	U		HD/L	1.0	1.0	04/11/22	VB22011B	94/11/22 20:00	VB22D11B	KCM
47. 1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	04/11/22	VB22D11B	04/17/22 20:00	VB22D11B	KCM
48. Tetrachloroethene	U		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
49, Toluene	U		pg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
50. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
51.1,1,1-Trichloroethane	Ü		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D118	KCM
‡ 52.1,1,2-Trichloroethane	U		pg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
53. Trichloroethene	U		µg/L	1.0	1.0	04/11/22	VB22011B	04/11/22 20:00	VB22D11B	KCM
54. Trichiorofluoromethane	U		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
55.1,2,3-Trichloropropane	U		µg/L	1.0	1.0	04/11/22	VB220118	04/11/22/20:00	VB22D11B	KCM
‡ 56.1,2,3-Trimethylbenzene	U		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
57. 1,2,4-Trimethylbenzene	U		µg/L	1.0	1.0	94/11/22	VB22D11B	04/11/22/20:00	VB22D11B	KCM
58.1,3,5-Trimethylberizene	U		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
59. V Inyl Chloride	U		µg/L	1.0	1.0	04/11/22	VB22011B	04/11/22/20:00	VB22D11B	KCM
60. m&p-Xylene	U		µg/L	2.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KOM
51.o-Xylene	U		µg/L	1.0	1.0	04/11/22	VB22011B	04/11/22 20:00	VB22D11B	KCM
‡ 62.Xylenes	U		DO/L	3.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM



Order: A07873 04/12/22 Date:

Client identification:

Arcadis U.S., Inc. - Novi

Sample Description: Trip Blank

Chain of Custody:

207003

Client Project Name: TRW Milliord ZF Active Salety

Sample No:

Collect Date:

04/08/22

Client Project No:

(30046730) 30046730

Sample Matrix:

Collect Time:

NA.

Sample Comments:

Definitions:

Q: Qualifier (see definitions at end of report) NA: Not Applicable 1: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS

Allquot ID: A07873-003

Blank: Trip

Mairtx: Blank: Trip

Method: EPA 5030C/EPA 8260D Description: Trip Blank

Parameler(s)	Result	Q	Units	Reporting Limit	Dilutton	Prepa P. Date	ration P. Batch	A. Date	alysis A. Baich	init.
1.Acetone	U.		µty1.	50	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D118	KGM
2.A crylonitrile	U		µg/L	2.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
3. Berzene	0		µg/L	1.0	1.0	04/11/22	VB22D11B	04/17/22 19:33	VB22D118	KCM
4. Bromobenzene	U		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
5. Bromochloromethane	U.		µg/L	1.0	1.0	04/11/22	VB22011B	04/11/22 19:33	VB22D118	KCM
6. Bromodichloromethane	B.		pg/L	1.0	1.0	04/11/22	VB22011B	04/11/22 19:33	VB22D11B	KCM
7. Bromoform	U		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
8, Bromomethane	U		µg/L	5.0	1.0	04/11/22	VB22011B	04/11/22 19:33	VB22D11B	KCM
9.2-Butanone	U		µg/L	25	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D118	KOM
10. n-Buty/benzene	U.		µg/L	1.0	1.0	04/11/22	VB22011B	04/11/22 19:33	VB22D11B	KCM
11. sec-Butylbenzene	Ü.		pg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D119	KCM
12.teri-Bulyibenzene	Ü		pg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D118	KCM
13. Carbon Disulfide	U.		µg/L	5.0	1.0	04/11/22	VB22D11B	04/17/22 19:33	VB22D118	KCM
14. Carbon Tetrachloride	U.		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
15. Chlorobergene	U		pg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
16. Chiome thane	U		µg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
17. Chloroform	U		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
18, Chioromethane	U	V÷ L÷	hb/r	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
19.2-Chlorotoluene	U		µg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D118	KCM
‡ 20.1,2-Dibromo-3-chioropropane (SIM)	U:		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
21. Olbromachiarometriane	U.		jug/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB220118	KCM
22. Dibromomethane	Ü		pg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
23.1,2-Dichlorobenzere	0		µg/L	1.0	1.0	04/11/22	VB22D11B	04/17/22 19:33	VB22D118	KCM
24.1,3-Dichlorobenzere	U		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
25. 1,4 Dichlorobenzere	U		pg/L	1.0	1.0	04/11/22	VB22D11B	0411/22 19:33	VB22D11B	KCM
26. Dichlorodifluoromethane	B.		pg/L	5.0	1.0	04/11/22	VB22011B	04/11/22 19:33	VB22D11B	KCM
27.1,1-Dichloroethane	U.		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D118	KCM
29.1,2-Dichloroethane	U		pg/L	1.0	1.0	04/11/22	VB22011B	04/11/22 19:33	VB22D11B	KCM
29.1,1-Dichloroethene	U		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D118	KIDM
30. cls-1,2-Dichloroethere	U.		µg/L	1.0	1.0	04/11/22	VB22011B	04/11/22 19:33	VB22D11B	KCM
31 trans-1,2-Dichloroethene	U.		pp/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB220119	KCM
S2. 1,2-Dichloropropane	U		pp/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D118	KCM.
33. cls-1,3-Ekchloropropene	U.		µg/L	0.50	21.0	04/11/22	VB22D11B	04/1/22 19:33	VB22D11B	KCM
34. trans-1,9-Dichioropropene	U		µg/L	0.50	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
35. Ethylberoene	U		pg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KOM
36. Ethylene Dibromide	U		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail

Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601

T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368 F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584



A07973 Order: Date: 0412/22

Client identification: Arcadis U.S., Inc. - Novi Sample Description: Trip Blank Chain of Custody: 207003

Client Project Name: TRW Milliord ZF Active Salety Collect Date: 04/08/22 Sample No: (30046730)

Client Project No: 30046730 Sample Matrix: Blank: Trip Collect Time: NA

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable 1: Parameter not included in NELAC Scope of Analysis.

Votatile Organic Compounds (VOCs) b Method: EPA 5030C/EPA 8260D		200	The Contract of	A07873-003 Trip Blank	Mairtx: Blank: Trip				
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	Prepa P. Date	ration P. Batch	A. Dale	alysis A. Balch	init.
37.2-Hexanone	U	µg/L	50	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D118	KON
38. isopropylbenzene	U	ирл.	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
39. 4-Methyl-2-pentanone	U	μg/L	50	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KON
40. Methylene Chloride	U	µg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D119	KCN
41.2-Methylnaphthalene	U	µg/L	5.0	1.0	04/11/22	V922D11B	04/11/22 19:33	VB22D118	KCN
42.MTBE	U	µg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
43. Naphthalene	IJ	µg/L	5.0	1.0	04/11/22	V922011B	04/11/22 19:33	VB22D118	KON
44. n-Propylberzene	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D119	KCN
45. Styrene	U	µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D118	KON
46.1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
47.1,1,2,2-Tetrachloroethane	Ü	µg/L	1.0	1.0	04/11/22	V9220118	04/11/22 19:33	VB22D11B	KON
48. Tetrachioroethene	U	µg/L	1.0	1.0	04/11/22	VB22011B	04/11/22 19:33	VB22D118	KCN
49. Totuene	U	μg/L	1,0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KON
50.1,2,4-Trionioropenzene	U	µg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
51.1,1,1-Trichloroethane	U	µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KON
‡ 52.1,1,2-Trichloroethane	U	µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KON
53. Trichioroethene	U	pg/L	1.0	1.0	04/11/22	V922011B	04/11/22 19:33	VB22D118	KON
54. Trichlorofluoromethane	.U	µg/1.	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
55.1,2,3-Trichloropropane	U	µg/L	1.0	1.0	04/11/22	VB22011B	04/11/22 19:33	VB22D118	KCN
\$ 56.1,2,3-Trimethylbenzene	U	µg/L	1.0	1.0	04/11/22	VB22011B	04/11/22 19:33	VB22D119	KCN
57, 1,2,4-Trimetry/benzene	U	μg/L	1.0	1.0	04/11/22	V922D11B	04/11/22 19:33	VB22D118	KCN
58.1,3,5-Trimethylbenzerie	U	µg/L	1.0	1.0	04/11/22	VB22011B	04/11/22 19:33	VB22D11B	KCN
59, V triyl Chloride	U	pig/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D118	KCN
60.map-Xylene	U	μg/L	2.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCA
61.o-Xytene	U	µg/L	1.0	1.0	04/11/22	VB22011B	04/11/22 19:33	VB22D118	KON
‡ 62.Xylenes	U	µg/L	3.0	1.0	04/11/22	VB22011B	04/11/22 19:33	VB22D11B	KON



Analytical Laboratory Report Laboratory Project Number: A07873

Order: A07873 Date: 04/12/22

Definitions/ Qualifiers:

- A: Spike recovery or precision unusable due to dilution.
- B: The analyte was detected in the associated method blank.
- E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
- J: The concentration is an estimated value.
- M: Modified Method
- U: The analyle was not detected at or above the reporting limit.
- X: Matrix Interference has resulted in a raised reporting limit or distorted result.
- W: Results reported on a wet-weight basis.
- *: Value reported is outside QC limits

Exception Summary:

L+ : Recovery in the associated laboratory sample (LCS) exceeds the upper control limit. Results may be blased high.

V+ : Recovery in the associated continuing calibration verification sample (COV) exceeds the upper control limit. Results

Analysis Locations:

All analyses performed in Holt.



Accreditation Number(s):

T104704518-19-8 (TX)

Attachment 8

April 14, EGLE Letter (Response to ZF)



STATE OF MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

LANSING



April 14, 2022

VIA E-MAIL

Robert Bleazard
Sr. EHS Manager Environmental Remediation
ZF Health, Safety, and Environment
ZF Active Safety US Inc.
12001 Tech Center Drive
Livonia, Michigan 48150-2122

SUBJECT: Response to ZF Active Safety US Inc. Additional Information for

Consideration Related to Administrative Order for Response Activity;

EGLE Docket No. AO-RRD-22-001 (AO)

Dear Robert Bleazard:

The Department of Environment, Great Lakes, and Energy (EGLE) has received ZF Active Safety US Inc. (ZF) correspondence dated April 8, 2022, and April 13, 2022, containing technical information for EGLE's consideration pertaining to the potentially anomalous groundwater parameters in monitoring well OW-16D2 during sampling.

Although EGLE agrees that the information presented by ZF warrants additional investigation by ZF, EGLE does not believe the information presented thus far demonstrates that there is no imminent and substantial endangerment to the public drinking water supply for the Village of Milford. Therefore, EGLE cannot grant ZF's requested extension of the AO response deadline, and EGLE expects ZF's timely compliance with the AO.

If ZF intends to submit a work plan to undertake a parallel path to further investigate concerns regarding the integrity of OW-16D2, EGLE does not discourage those efforts, however the work plan should provide for the following:

- Continue to rehabilitate monitoring well OW-16D2 with mechanical and/or additive techniques. Collect post-rehabilitation groundwater samples for a sufficient period of time to demonstrate the samples are representative of aquifer conditions.
- Complete vertical aquifer profiling in close proximity to OW-16D2 to verify the screen is in the zone of highest contamination. Based on the completed vertical aquifer profile, if the depth of contamination differs from the screening interval of OW-16D2, install a new monitoring well to be screened at the depth of the highest level of contamination.

Install a new monitoring well to replace OW-16D2 if it cannot be rehabilitated.
 The new monitoring well shall be screened based on the conclusions from the vertical aquifer profiling.

EGLE remains open to reconsider its position regarding the Administrative Order if additional data demonstrates that there is not an imminent and substantial risk to the Village of Milford's drinking water wells.

If you have questions regarding this matter, please contact Kevin Wojciechowski, Project Manager, at 586-623-2948 or WojciechowskiK@Michigan.gov; or you may contact me.

Sincerely,

Mike Neller, Director

Remediation & Redevelopment Division

517-512-5859

cc: Danielle Allison-Yokom, Michigan Department of Attorney General Aaron B. Keatley, Chief Deputy Director, EGLE Joshua Mosher, EGLE Mary Miller, EGLE Dan Yordanich, EGLE Paul Owens, EGLE Darren Bowling, EGLE Cheryl Wilson, EGLE Tiffany Yusko-Kotimko, EGLE

Tiffany Yusko-Kotimko, EGLE Kevin Wojciechowski, EGLE Lyndsey Hagy, EGLE

Katie Noetzel, EGLE

Attachment 9

Progress Report No. 1



Disclaimer: This document is a DRAFT document that has not received final approval from the Department of Environment, Great Lakes, and Energy (EGLE). This document was prepared pursuant to a governmental administrative order. The opinions, findings, and conclusions expressed are those of the authors and not those of the EGLE.

ZF Active Safety US Inc.

PROGRESS REPORT NO. 1

Former Kelsey-Hayes Company Site, Milford, Michigan

Administrative Order for Response Activity, EGLE Docket No. AO-RRD-22-001

PROGRESS REPORT NO. 1 FORMER KELSEY-HAYES COMPANY MILFORD, MICHIGAN ADMINISTRATIVE ORDER FOR RESPONSE ACTIVITY EGLE DOCKET NO. AO-RRD-22-001

This progress report has been prepared and is being submitted pursuant to Section XII of the Administrative Order for Response Activity, Docket No. AO-RRD-22-001 (AO) issued by the Department of Environment, Great Lakes, and Energy (EGLE) to ZF Active Safety US Inc. (ZF or Respondent) on March 16, 2022 (effective date), with respect to the former Kelsey-Hayes site in Milford, Michigan (the "Site"). This progress report provides information regarding response activities and other matters related to the AO, that have occurred since the AO effective date (March 16, 2022, through May 10, 2022).

Chronological Description of Activities Conducted during the Specified Reporting Period:

- Observation Well OW-16D2 was sampled on March 21, 2022, and April 4, 8, and 18, 2022. Samples were submitted to Eurofins Canton, Ohio (Eurofins) for analysis of chlorinated volatile organic compounds (VOCs) using United States Environmental Protection Agency (USEPA) Test Method 8260D. In addition, samples collected on April 4, 8, and 18, 2022 were also submitted to Fibertec Environmental Services of Holt, Michigan (Fibertec) for expedited analysis (48-hour turnaround time) of VOCs using USEPA Test Method 8260D. All results have been submitted to EGLE and the Village of Milford (VOM) and are attached. No vinyl chloride was detected in any of the April samples.
- Pursuant to Section XVIII of the AO, a conference with EGLE was conducted on March 31, 2022, to
 discuss the AO. ZF presented a summary of the extensive data collected with respect to the Site
 including a timeline of response actions and ZF's conceptual site model.
- On April 1, 2022, initial redevelopment activities were conducted on OW-16D2 due to prior
 observations which indicated that the condition of the well may have been compromised and previous
 water samples from OW-16D2 were likely not representative of groundwater conditions in the aquifer.
 Following the redevelopment activities, information collected from OW-16D2 indicated that the well
 screen, sand pack, and/or formation around the screen was not functioning as designed. Even after
 this initial redevelopment work and removal of all of the water from the well, the water level in the well
 recovered very slowly.
- Detailed information about the initial redevelopment work on OW-16D2 was presented to EGLE in a letter dated April 8, 2022 and is included in Attachment 1 (the "April 8th Letter"). The April 8th Letter includes laboratory results from a post well redevelopment sample collected on Monday, April 4, 2022. Vinyl chloride was not detected in the sample. In addition, ZF also provided additional groundwater field parameters for low-flow groundwater sampling of OW-16D2 since 2010, as requested by EGLE during the March 31st meeting. The findings from the initial well redevelopment activities on OW-16D2 provided compelling evidence of well integrity and performance and data quality concerns at OW-16D2 that indicated further evaluation and corrective actions on the well were appropriate.

- On April 13, 2022, ZF submitted another letter to EGLE presenting laboratory analytical results of a second post-redevelopment sample collected from OW-16D2 on April 8, 2022 (the "April 13th Letter"). No vinyl chloride was detected in the sample. Based on the observations from the initial well redevelopment work on OW-16D2 and no vinyl chloride detected in the April 8, 2022 sample, it appears that the vinyl chloride that had been detected in OW-16D2 prior to the recent well redevelopment work was the result of stagnant water within the well and not representative of true groundwater conditions. In the April 13th Letter, ZF indicated that a detailed work plan would be submitted to EGLE by April 22, 2022, describing further work to rehabilitate OW-16D2 (or replace it) and additional sampling of OW-16D2 to fully understand the condition of the well and the presence of vinyl chloride in samples collected prior to well rehabilitation activities. ZF also requested a 60-day extension of the AO response deadline to complete the anticipated work plan and well rehabilitation activities. A copy of the April 13th Letter is included as Attachment 2.
- On April 14, 2022, EGLE responded to ZF's April 8th Letter and April 13th Letter and agreed that the information presented by ZF warrants additional investigation by ZF. However, EGLE would not grant ZF an extension of the AO deadline (the "EGLE April 14th Letter"). Nonetheless, EGLE acknowledged that ZF should submit a work plan to further investigate the condition of OW-16D2. EGLE encouraged the review and rehabilitation of OW-16D2, requested vertical aquifer profiling (VAP) near OW-16D2 to verify the zone of highest contamination, and suggested installing a new well if the depth of VOC impacts differs from the screened interval of OW-16D2. A copy of the EGLE April 14th Letter is included as Attachment 3.
- On April 15, 2022, pursuant to Section XVII of the AO, ZF submitted its response to the AO confirming that ZF intends to comply with the AO and the subsequent ELGE April 14th Letter. The April 15, 2022 response to the AO is included an Attachment 4.
- Pursuant to Section V of the AO, ZF and Arcadis conducted the initial design meeting/call on April 20, 2022, with representatives from EGLE Drinking Water and Environmental Health Division (DWEHD) -Warren District Office, the VOM, and Wood (consultants for the VOM). A copy of the initial design meeting minutes is included in Attachment 5.
- On April 27, 2022, a follow-up conference call was conducted with ZF, Arcadis, EGLE DWEHD-WDO, VOM, and Wood. During that call, ZF verified that it will take the lead role in designing the treatment solution to prevent vinyl chloride from entering the VOM municipal drinking water system that is required by the AO.
- On April 27, 2022, EGLE held a virtual public meeting regarding the AO.
- As a follow-up to the initial design meeting, the Arcadis design team met at the VOM water plant on April 28, 2022, to review the existing treatment equipment at the iron removal plant and the well pump house. Information on the current operation and existing layout was noted. The VOM, Wood, and EGLE appeared open to other options on the type of air stripping system (alternate to the Packed Tower Air Stripper indicated in the AO) and where it's placed into service (before versus after the iron removal process). As a follow-up to this meeting, it was decided that design status update meetings would be scheduled with ZF, Arcadis, VOM, EGLE, and Wood (the "Design Group") two times a week. Design status update meetings have occurred on May 3, 6, and 10, 2022, with the Design Group. Based on these calls, the Design Group agreed that the design/construction would be much more complicated to install downstream of the iron removal process and that two air stripper units installed in place of the two existing aerators is acceptable. Although the potential for iron fouling is a consideration, the current aeration units don't appear to have an iron issue and the water chemistry

data provided by Wood does not suggest a significant iron fouling issue. A draft copy of the process flow diagram (prepared by Arcadis) and a summary of the basis of design and air stripping unit information provided by DeLoach Industries, Inc. (potential supplier of the air stripper units) are included as Attachment 6. Meeting minutes from the May 3, 6, and 10, 2022 Design Group meetings are included in Attachment 5.

- ZF submitted a Monitoring Well Rehabilitation and Vertical Aquifer Profiling Work Plan to EGLE on April 22, 2022 (the "Work Plan"). Pursuant to the Work Plan, ZF will perform the work listed in EGLE's April 14 Letter (Attachment 3) and will also conduct additional activities to further investigate, redevelop and possibly replace OW-16D2, and gather information to further assess the aquifer. The Work Plan is included as Attachment 7.
- On May 4, 2022, EGLE responded to ZF's Work Plan submittal and provided recommendations, questions, and comments regarding the Work Plan (the "EGLE May 4th Letter"). The EGLE May 4th Letter is included as Attachment 8.
- In response to EGLE's May 4th Letter regarding the Work Plan, ZF submitted a letter on May 15, 2022 to EGLE addressing each of EGLE's comments concerning the Work Plan (the "May 15th Letter").
 The May 15th Letter is included as Attachment 9.

Results of Sampling and Tests and other Data

As indicated above, OW-16D2 was sampled on March 21, 2022, and April 4, 8, and 18, 2022.
 Samples were submitted to Eurofins for analysis of VOCs using USEPA Test Method 8260D. In addition, samples collected on April 4, 8, and 18, 2022 were also submitted to Fibertec for expedited analysis (48-hour turnaround time) of VOCs using USEPA Test Method 8260D. A copy of the laboratory analytical reports is included in Attachment 10. No vinyl chloride was detected in any of the April samples.

Status of Access Issues

• There have been no issues with access during the reporting period.

Scheduled for the Next Reporting Period

- Conduct sampling at OW-16D2 on May 18, 2022, with analysis conducted by Eurofins within 10 days.
- Continue to conduct design status update meetings with the Design Group two times per week.
- Conduct the 80% Design Meeting on May 20, 2022.
- Perform vertical aguifer profiling during the period of May 16 through May 27, 2022.
- Perform rehabilitation activities of OW-16D2 during the month of June 2022.

Other Relevant Information

No other relevant information was identified during this reporting period.

Attachments

- 1. April 8, 2022 Letter from ZF
- 2. April 13, 2022 Letter from ZF
- 3. April 14, 2022 Letter from EGLE
- 4. April 15, 2022 Letter From ZF
- 5. Initial and Follow-up Design Meeting Minutes (April 20, May 3, 6, and 10, 2022)
- 6. Draft Process Flow Diagram and Summary of the Basis of Design and Air Stripping Unit Information
- 7. April 22, 2022 ZF Work Plan
- 8. May 4, 2022 letter from EGLE15
- 9. May 15, 2022 Letter from ZF
- 10. Laboratory Analytical Reports (Observation Well OW-16D2)

ATTACHMENT 1

April 8, 2022 Letter from ZF



ZF Active Safety US Inc. 12001 Tech Center Drive, Livonia, Michigan 48150-2122 Department Health Safety and Environmental

From Robert Bleazard
Phone +1 480 722-4866
Email Robert.Bleazard@zf.com

Date April 8, 2022

VIA E-MAIL TO: WojchiechowskiK@Michigan.gov

Kevin Wojciechowski, Project Manager Warren District Office Remediation and Redevelopment Division Michigan Department of Environment, Great Lakes, and Energy 27700 Donald Court Warren, Michigan 48092

RE: ZF Active Safety US Inc. Additional Information for Consideration by Michigan Department of

Environment, Great Lakes, and Energy Related to Administrative Order for Response Activity;

EGLE Docket No. AO-RRD-22-001.

Dear Mr. Wojciechowski,

ZF Active Safety US Inc. (ZF) appreciates the opportunity to meet with the Department of Environment, Great Lakes, and Energy (EGLE) last Thursday, March 31, 2022, to discuss the Administrative Order for Response Activity (AO) issued by EGLE to ZF, with respect to the former Kelsey-Hayes site in Milford, Michigan (the "Site").

As demonstrated by ZF's November 23, 2021 letter in response to EGLE's October 25, 2021 Compliance Communication and its presentation of information at the meeting, ZF and Arcadis have been reviewing the extensive data collected for the Kelsey-Hayes site, as well as any other available information, in order to understand the recent emergence of vinyl chloride in groundwater monitoring well OW-16D2 when that compound has not been detected at any time elsewhere in ZF's off-site monitoring well network in more than 25 years of monitoring. Furthermore, Arcadis recently noted an anomalous response in water level and certain groundwater parameters in the well during sampling, raising concerns regarding the possible integrity of the well screen and/or the sand pack surrounding the well screen. In addition, considering EGLE's concerns regarding the proximity of OW-16D2 to the Village of Milford municipal wells and the statement in the Administrative Order that "the presence of vinyl chloride in monitoring well OW-16D2, a known carcinogen, represents an imminent and substantial endangerment to the public health, safety, welfare, or the environment...," ZF and Arcadis carefully analyzed the current viability of OW-16D2 and began evaluating whether samples collected from this well are representative of the aquifer.

Arcadis initially questioned whether OW-16D2 may be compromised because there was significant drawdown in the well during most of the low-flow sampling events where vinyl chloride was detected and purge volumes were observed to be similar to the volume of standing water removed from the well. This indicated stagnant water conditions in the well. In addition, water samples with vinyl chloride detections had an oxidation reduction potential (ORP) in the range of -60 to -134 millivolts and low dissolved oxygen (DO) levels (see attached Table 1 – Attachment 1). These conditions within the well provide a reducing environment where anerobic microbes are active and reductive dichlorination of chlorinated volatile organic compounds (CVOCs) can occur (i.e., cis-1,2-dichloroethene to vinyl chloride). Furthermore, vinyl chloride has not been detected in the

six observation wells, OW-9, OW-09ML-A/B/C/D, and MW-03-94, located upgradient of OW-16D2, in the Village of Milford drinking water wells, or in any of the other monitoring wells regularly sampled by Arcadis that have proven to be reliable in monitoring other CVOCs including trichloroethene (TCE). Collectively, these multiple lines of evidence are what caused Arcadis to take a closer look at the condition of OW-16D2 and also suggests that the recent detection of vinyl chloride in OW-16D2 is localized, anomalous, and warrants further evaluation. The inability of OW-16D2 to sustain EGLE's low-flow sampling and groundwater parameter stabilization requirements also indicates that groundwater samples collected from OW-16D2 are: 1) not representative of groundwater conditions; 2) not comparable to EGLE's Part 201 Cleanup Criteria for compliance purposes; and 3) therefore not a reliable basis for the conclusion by EGLE that OW-16D2 poses an imminent and substantial endangerment to the Village of Milford wells.

As Arcadis has previously discussed with you and as mentioned during the meeting, ZF's monitoring well OW-16D2 was further examined and redeveloped on Friday, April 1st with the objective of improving hydraulic communication between the well and formation to produce representative groundwater samples. During the examination and redevelopment of OW-16D2, Stearns, the well driller, used a surge block with a vacuum hose attachment to work up and down within the well screen and draw out sediments consistent with standard practice. Stearns moved this apparatus up and down within the well screen several times. During the process, there was initial discolored water and some fine sediment removed and then it cleared up. The plan was to then drop a pump down the well and purge water/groundwater as it re-entered the well, removing as much water as possible. However, after pulling the surge block apparatus out of the well, there was only about 2 feet of water remaining in the well (approximately 1/3 gallon). The amount of water in the well when Stearns started the redevelopment process was about 100 feet (approximately 16 gallons). This indicates that the well screen, sand pack, and/or formation around the screen is not functioning as designed. Arcadis measured the level of water in the well after this work and it recovered very slowly, at a rate of less than 1 foot per hour. Based on these observations, it appears that the water in the screened interval of the well was stagnant and therefore not fully representative of groundwater conditions in the aquifer. These well redevelopment findings, combined with the observations noted above regarding well behavior during sampling, indicate that OW-16D2 has become compromised and cannot be relied on for continued groundwater monitoring without further evaluation and potential corrective action on the well.

Following the redevelopment, Arcadis returned to sample OW-16D2 on Monday, April 4th and observed that the depth to groundwater was about 50 feet (so about 50 feet had recovered over the weekend). Arcadis used a low-flow bladder pump to purge the well (this took about 2 hours) and then sampled the well. The total drawdown of the well was approximately 7 feet during the sampling. Arcadis observed the water level in OW-16D2 to be relatively level for the last 10 minutes prior to sampling, indicating that the recharge was coming from the aquifer and not stagnant water within the well. One set of groundwater samples was collected on April 4th and was dropped off at Fibertec (Holt, Michigan) the same day, with a requested 48-hour turn-around-time and another set of samples was sent to Eurofins-TestAmerica for analysis under a standard turn-around-time. Analysis for volatile organic compounds using EPA Method 8260 was requested for both sets of samples.

The results from the Fibertec samples were returned on April 6th and as you know, were non-detect (less than 1.0 ug/L detection limit) for vinyl chloride. In contrast, cis-1,2-dichloroethene, trans-1,2-dichloroethene, and 1,1-dichloroethane were detected and the concentrations of these other CVOCs were consistent with previous samples collected from OW-16D2, indicating that these compounds are stable in the formation water that entered OW-16D2 after development and are not degrading to vinyl chloride in the vicinity of OW-16D2. The laboratory

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analytical report (Attachment 2) was provided to you on April 6th. These findings, combined with the previous OW-16D2 sampling results and the well redevelopment observations described above show that the production of vinyl chloride appears to be a function of stagnant water within the well caused by the malfunctioning well itself. Additional samples from OW-16D2 will be collected on April 8th and April 18th. Arcadis will sample the well under as close to low-flow conditions as the well is able to sustain and will promptly report the results to EGLE.

Based on the observed conditions of OW-16D2 during the recent sampling and redevelopment of the well and the historical information provided above, there is an objectively reasonable and technical basis to conclude that the recent samples collected before the redevelopment of the well should not be relied upon as accurate representations of aquifer conditions in that location. Specifically, the following observations point to a lack of reliability for recent vinyl chloride results collected from OW-16D2:

- Inability of the OW-16D2 monitoring well to sustain low-flow purging/sampling consistent with EGLE guidelines;
- Recent consistent reducing conditions (i.e., negative ORP, low DO) with stagnant water conditions observed
 in OW-16D2, correlating with the observance of vinyl chloride detections that have improved after well
 redevelopment;
- The first occurrence of vinyl chloride in May 2021 after more than 25 years of monitoring, and its subsequent lack of detection following redevelopment of OW-16D2; while other CVOCs in OW-16D2 remained consistent with historical results:
- Continuing lack of vinyl chloride detections in any other monitoring wells, notably those that have unquestionably demonstrated the extent of TCE impacts, the presumed parent CVOC for dichlorination daughter products;
- Lack of vinyl chloride detections in Village of Milford municipal wells despite groundwater velocity calculations showing it would have arrived months ago if mobile.

Collectively, these findings provide compelling evidence of data quality concerns for OW-16D2 that must be further evaluated and corrected. It is imperative that any conclusions drawn from OW-16D2 sample results and determinations of potential additional response activities are based on accurate and reliable, representative data collected from a properly-performing monitoring well in accordance with EGLE requirements. Therefore, ZF intends to continue to evaluate OW-16D2 and collect additional data for this well which will be expedited and reported to EGLE as soon as available. We are planning to re-sample OW-16D2 on April 8th one week following redevelopment as previously discussed with you via email on April 1st. OW-16D2 will also be sampled again on April 18th.

In addition to the additional monitoring planned for OW-16D2, ZF is also evaluating potential corrective measures for the well including, further well rehabilitation using an approvable drinking water well additive as was communicated with EGLE via email on April 4th, and a downhole camera survey of the well. ZF is also evaluating potentially replacing OW-16D2 if the rehabilitation is not feasible or not successful, as you suggested. Such corrective measures would include a work plan that would be submitted to EGLE for review and approval, and careful coordination with the Village of Milford to ensure protection of the municipal wells.

In light of the recent findings regarding OW-16D2 detailed above and considering that the basis for the AO is EGLE's determination that the vinyl chloride reported in recent samples from OW-16D2 above the Part 201 Drinking Water Criterion, pose an imminent and substantial endangerment to the Village of Milford municipal wells due to their proximity to OW-16D2, it would be prudent for all parties to have reliable data and an objective basis for decisions moving forward. Allowing ZF more time to remedy OW-16D2 and collect accurate data from the well will allow the parties to make a proper technical determination of whether vinyl chloride is in the aquifer at the location of OW-16D2. This information would also provide a strong basis to determine if there is any reasonably objective and technical need to implement the response activity required by the AO and would further serve to inform future discussions and decisions by EGLE, the Village of Milford, and ZF. ZF will follow-up this correspondence with the sample results to be collected from OW-16D2 on April 8th, which we expect to receive from the lab by April 12th, and with our plans to implement the OW-16D2 rehabilitation and/or replacement as necessary. ZF will also provide a formal response to the AO, but wanted to provide you with this recently obtained additional information for your consideration at this time.

Thank you for your attention to these matters and please include this letter and its attachments in the administrative record for the AO and the Site.

If you have any questions, please feel free to contact me at the phone number listed in the header on the first page of this letter, Mr. Scott Detwiler – ZF Project Manager at 480-722-4139, or Mr. John McInnis of Arcadis at 248-994-2285.

Sincerely,

Robert Bleazard

Sr. EHS Manager – Environmental Remediation

ZF Health, Safety, and Environment

Robert A Bleazane

Enclosure

cc by email only:

Mr. Scott Detwiler, ZF

Mr. Robert Bleazard, ZF

Ms. Kelly Martorano, ZF

Mr. John McInnis, Arcadis

Mr. Troy Sclafani, Arcadis Mr. Grant Gilezan, Dykema

Mr. Paul Stewart, Dykema

Mr. Christian Wuerth, Village Manager, Village of Milford

Ms. Polly Synk, Michigan Department of Attorney General

Ms. Danielle Allison-Yokom, Michigan Department of Attorney General

Mr. Aaron B. Keatley, EGLE - Chief Deputy Director, EGLE

Mr. Mike Neller, EGLE - Remediation and Redevelopment Director

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Page 5 of 5 April 8, 2022

Mr. Josh Mosher, EGLE – Remediation and Redevelopment Assistant Director

Mr. Dan Yordanich, EGLE

Ms. Mary Miller, EGLE

Mr. Darren Bowling, EGLE

Mr. Paul Owens, EGLE

Ms. Cheryl Wilson, EGLE

Ms. Lyndsey Hagy, EGLE

Ms. Katie Noetzel, EGLE

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ATTACHMENT 1

Table 1 OW16D2 Groundwater Analytical Results and Field Parameters Former Kelsey-Hayes Milford Plant



Sample Identification:	Residential Drinking Water	Groundwater Surface Water Interface								Obs	ervation	Well OW-	16D2								
Sample Collection Date:	Criteria	Criteria	6/15/2010	12/17/2010	6/15/2011	12/14/2011	6/29/2012	12/12/2012	6/12/2013	12/11/2013	6/15/2014	11/24/2014	6/24/2015	12/9/2015 ¹	6/14/20161	12/13/2016	12/6/2017	6/12/2018	12/4/2018	6/10/2019	12/3/2019
Tetrachloroethene	5.0 (A)	60 (X)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	5.0 (A)	200 (X)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	70 (A)	620	2.4	3.2	2.1	<1.0	1.4	12	<1.0	3.4	<1.0	22	<1.0	19	<1.0	1.7	18	<1.0	4.1	1.2	1.1
trans-1,2-Dichloroethene	100 (A)	1,500 (X)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.3	<1.0	1.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	880	740	<1.0	<1.0	1.1	<1.0	<1.0	2.1	<1.0	<1.0	<1.0	3.0	<1.0	2.3	<1.0	<1.0	1.9	<1.0	2.1	1.6	1.4
Vinyl chloride	2.0 (A)	13 (X)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Field Parameters																					
Drawdown (feet)			-0.3	2.8	0.0	1.5	0.0	0.0	0.0	0.0	0.0	1.3	0.4	5.1	4.7	12.2	8.4	4.6	5.5	8.5	3.5
pH (standard units)			7.36	7.74	7.82	7.44	7.60	7.57	7.90	7.85	7.17	7.79	7.82	7.56	7.62	7.91	8.05	7.67	7.41	7.87	7.82
Conductivity (milliSiemens pe	r centimenter)		0.59	0.56	0.64	0.54	0.64	0.60	0.64	0.59	0.60	0.80	0.634	0.952 1	0.827 1	0.604	0.63	0.64	0.62	0.64	0.82
Turbidity (Nephelometric Turt	oidity Unit)		1.09	4.22	3.67	0.76	3.68	2.24	0.60	2.43	2.19	102	2.27	52.1	0.61	1.36	11.7	0.80	2.2	3.06	0.79
Dissolved Oxygen (milligrams	s per liter)		1.33	0.47	0.11	1.44	0.58	0.8	1.19	3.45	4.99	3.8	4.08	0.19	3.22	0.38	0.3	3.04	1.21	0.25	11.74
Temperature (degrees Celsiu	is)		14.66	9.23	15.71	10.33	17.45	9.90	15.19	10.39	14.72	10.83	14.1	11.75	13.89	11.33	10.6	14.60	10.96	12.7	8.6
Oxidation Reduction Potentia	l (millivolt)		75	-12.5	78.3	12.7	125.1	110.6	115.1	115	82.4	-17.4	-39.1	-155.3	27.7	101.4	-121.6	203.7	159.9	231.9	122

Sample Identification:	Residential Drinking Water	Groundwater Surface Water Interface								Observa	tion Wel	OW-16D2	2							
Sample Collection Date:	Criteria	Criteria	5/13/2020	11/17/2020	5/13/2021	6/8/2021	8/3/2021	8/16/2021	9/1/2021	9/13/2021	9/27/2021	10/11/2021	10/25/2021	11/8/2021	12/6/2021	1/4/2022	1/25/2022	2/17/2022	3/21/2022	4/4/2022
Tetrachloroethene	5.0 (A)	60 (X)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	5.0 (A)	200 (X)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	70 (A)	620	<1.0	<1.0	17	10	16	13	16	20	18	12	17	17	8.2	15	15	12	18	19
trans-1,2-Dichloroethene	100 (A)	1,500 (X)	<1.0	<1.0	1.3	<1.0	1.6	1.1	1.3	1.7	1.7	1.1	1.6	1.5	<1.0	1.6	1.4	1.1	1.6	1.7
1,1-Dichloroethane	880	740	<1.0	<1.0	3.8	2.4	3.8	3.0	3.2	3.9	3.7	2.8	3.8	4.2	2.0	3.0	3.4	3.1	3.7	3.5
Vinyl chloride	2.0 (A)	13 (X)	<1.0	<1.0	3.5	1.2	3.0	1.8	1.7	1.6	1.8	1.4	1.5	1.5	<1.0	2.5	3.2	2.0	2.3	<1.0
First Depth to Water																				
Field Parameters																				
Drawdown (feet)			4.2	10.2	0.0	0.0	12.7	14.2	15.0	10.6	13.7	15.2	8.1	10.9	7.5	8.1	17.4	17.4	7.1	6.9
pH (standard units)			8.51	8.44	7.89	7.6	7.5	7.68	7.64	7.28	7.38	7.81	7.49	7.43	8.02	7.56	7.54	7.77	7.54	7.43
Conductivity (milliSiemens pe	er centimenter)		0.78	0.71	0.93	0.85	0.93	0.718	1.011	1.03	1.07	0.97	1.09	1.07	0.84	1.1	1.11	0.985	1.082	1.1
Turbidity (Nephelometric Turb	oidity Unit)		2.29	1.08	59.6	5.29	33.8	6.82	3.86	3.9	9.44	9.05	10.7	10.1	4.74	28.4	13.7	4.9	3.04	96.3
Dissolved Oxygen (milligrams	s per liter)		4.9	9.67	0.45	0.41	1.32	0.25	0.38	0.86	0.22	0.58	0.15	0.17	0.27	0.2	0.1	0.57	0.51	5.81
Temperature (degrees Celsiu	is)		11.6	12.3	12.2	17.4	15.6	14.1	15	14.1	15	15.5	12.4	14	10.8	10.8	9.8	9.9	10.4	7.1
Oxidation Reduction Potentia	l (millivolt)		155.1	12.1	-134	-104.1	-99	-139.1	-74.7	-64.8	-89.9	-99.2	-88.2	-66.4	-14	-93.1	-96.7	-61.3	-72.3	3.0

Notes:

All volatile organic compound concentrations are in micrograms per liter (µg/L).

(A) Criterion is the State of Michigan Drinking Water Standard established pursuant to Section 5 of the Safe Drinking Water Act No. 399 of the Public Acts of 1976.

(X) The Groundwater Surface Water Interface (GSI) criterion shown is not protective for surface water that is used as a drinking water source.

1 Specific Conductivity

ATTACHMENT 2



Wednesday, April 06, 2022

Fibertec Project Number:

A07755

Project Identification:

TRW Milford ZF Active Safety (30046730) /30046730

Submittal Date:

04/04/2022

Mrs. Marina Samp Arcadis U.S., Inc. - Novi 28550 Cabot Drive Suite 500 Novi, MI 48377

Dear Mrs. Samp,

Thank you for selecting Fiberiac Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345;

Sincerely,

By Soo Ricketts at 12:26 PM, Apr 86, 2022

For Daryl P. Strandbergh Laboratory Director

Enclosures



Order: Page: Date: A07755 2 of 10 04/06/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: FIELDBLANK_040422 Chain or Clustody: 201041

Client Project Name: TRW Milliord ZF Active Safety (30046730)

Client Project No. 30046730 Sample Maint: Blank: Field Collect Time: 11:45

Sample Comments:

Definitions: 0: Qualifier (see definitions at end of report) NA: Not Applicable 4: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Aliquot ID: AU7755-001 Matrix: Blank: Field Method: EPA 5030C/EPA 8260D Description: FIELDBLANK 040422

Paramelor(s)	Résult	o	Units	Reporting Limit	Dhutton	Prepa P. Date	ration P. Balch	A. Date	alysis A. Batch	"Ville
1.Acetone	0	3.5	µg/L	50	1.0	04/05/22	V122005B	04/05/22 00:21	V1220069	JME
1 2.Adylonitrie	U.		pg/L	2.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	V)220068	JIME
3.Bergana	U.		pp/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 00:21	V122005B	JAME
4. Bromoberize ne	U.		pg/L	1.0	1.0	84/05/22	V122D05B	0405/22 00:21	V122D05B	JME
5. Bromochloromethane	U		PD/L	1.0	1.0	04/05/22	V122005B	0406/22 00:21	V122006B	JMF
6. Bromodichioromethane	U		pg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	V122005B	JMF
7. Bromotorm	H		pays.	10	1.0	04/05/22	VI22D05B	0405/22/00:21	V122D05B	JIME
8, Bromomethane	Ц	V-	pg/L	5.0	1.0	04/05/22	V122D05B	04/06/22 00:21	V122005B	JMF
9.2-Butanone	U		μg/L	25	1.0	04/05/22	VI22005B	04/05/22 00:21	V/22005B	JIME
10. n-Buly/benzene	U		pg/L	1.0	1,0	04/05/22	VI22005B	04/06/22 00:21	V122005B	JMF
11. sec-Buly/benzene	H		pg/L	10	1.0	04/05/22	V122D05B	0405/22 00:21	V122D05B	JMF
12. teri-Butylberwene	Ų		pg/L	1.0	1.0	04/05/22	V122D05B	04/06/22 00:21	V122005B	JMF
13, Carbon Disultide	ш		jig/L	5.0	1.0	04/05/22	VI22065B	0406/22/00:21	V1220059	JMF
14. Carbon Tetractionide	U		pg/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 00:21	VI22005B	JIME
15. Chloroberzene	U.		µg/L	1.0	1.0	04/05/22	V122D05B	04/05/22 00:21	V122005B	JMF
16. Chloroe thane	U		pp/t.	5.0	1.0	04/05/22	VI22D05B	04/05/22 00:21	V1220058	JME
17, Chloroform	B		µg/L	1.0	1.0	04/05/22	VI22005B	04/05/22 00:21	V/220058	JIMF
18. Chloromethane	U	N-	HQT.	5.0	1,0	04/05/22	VI22005B	04/06/22 00:21	V122D05B	JIME
19.2-Chlorololuene	- 0		µg/L	5.0	1.0	04/05/22	VI22005B	04/06/22 00:21	V1220068	JMF
z 20.1,2-Dibromo-3-chloropropane (SIM)	0		HD/L	1.0	1.0	04/05/22	V122D05B	04/05/22 00:21	V122D05B	JMF
21. Dibromochioromethane	H		pg/L	5.0	1.0	04/06/22	V122D05B	04/05/22 00:21	V122D05B	JIME
22. Dibromomethane	U		µg/L	5.0	1.0	04/05/22	VI22D05B	04/05/22 00:21	V/22/005B	JIME
23. 1,2 Dichioropenzene	U		pg/L	1.0	1.0	04/05/22	VI22005B	04/06/22 00:21	V1220059	JMF
24.1,3-Dichlorobenzene	- 13		pgr	1.0	1.0	84/05/22	V122D05B	04/05/22 00:21	V122D05B	JME
25.1,4-Dichlorobenzene	U.		PDYL	1.0	1.0	04/05/22	V122005B	0406/22 00:21	V122005B	JAST
26. Dichlorodituoromethane	U		µg/L	5.0	1.0	04/05/22	VI22005B	04/06/22 00:21	V122005B	JMF
27.1.1-Dichloroethane	U		ha/r	1.0	1.0	04/05/22	VI22005B	0405/22 00:21	V/22D058	JMF
28.1,2-Dichloroethane	U		µg/L	1.0	1.0	04/05/22	V122D05B	04/06/22 00:21	V 122005B	JME
29. I,1-Dichioroethene	U		HD/L	10	1.0	04/05/22	VI22D05B	0406/22 00:21	V122D058	JMF
30. cis-1,2-Dichioroethene	U		pg/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 00:21	V122005B	JMF
31, Irans-1,2-Dichloroethene	ш		µg/L	1.0	1.0	04/05/22	V122005B	04/05/22 00:21	V)220058	JIME
32: 1,2-Dichloropropane	U		µg/L	1.0	1.0	04/05/22	V122D05B	04/06/22 00:21	V/220068	JMF
33. cts-1,3-Dichloropropene	U		µg/L	0.50	1.0	04/05/22	VI22D05B	04/05/22 00:21	V122005B	JM
34. trans-1,3-Dichioropropene	U.		pg/L	0.50	1.0	04/05/22	V122D05B	04/05/22 00:21	V122D05B	JMF
35, Etrythenzene	Ü		µg/L	1.0	1.0	04/05/22	VI22005B	04/06/22 00:21	V/22005B	JIME
36. Ethylene Dibromide	ш		pg/L	1.0	1.0	04/05/22	V122D05B	04/06/22 00:21	V122005B	JMF

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Codillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368 F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584



Order: Page: Date:

A07755 3 of 10 04/05/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: FIELDBLANK 040422

Blank: Fleid

Chain of Custody: Collect Date:

201041

Client Project No. 30046730

Client Project Name: TRW Millord ZF Active Salety (30046730)

Sample No: Sample Matrix

Called Time:

04/04/22

Sample Comments:

Definitions: Q: Qualifler (see definitions at end of report) NA: Not Applicable :: Parameter not included in NELAC Scope of Analysis.

11:45

Volatile Organic Compounds (VOCs) by GC MS Mairtx: Blank: Fleid Allquot ID: A 07755-001

Method: EPA 5030C/EPA 8260D Description: FIELDBLANK_040422

Paramelenisi	Result	a	Units	Reporting Limit	Dilutton	Propa P. Date	ration P. Balch	A. Date	alysis A Batch	Init
37.2-Hexamine	N.	E2200	port	50	1,0	04/05/22	VI22005B	04/05/22 00:21	V122D06B	JM
38. Isopropyibenzene	U		µg/L	5.0	1.0	04/05/22	VI22005B	04/06/22 00:21	V122006B	JM
59, 4-Methyl-2-pentanone	U		µg/L	50	1,0	04/05/22	VI22005B	04/05/22 00:21	V122D068	JM
40. Methylene Chloride	U		pg/L	5.0	1.0	04/05/22	VI22005B	04/06/22 00:21	V122006B	JM
# 41,2-Melhytnephinslene	U		MOVE	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	V/22/0068	UMB
42.MTBE	0		µg/L	5.0	1.0	04/05/22	V122D05B	04/06/22 00:21	V122D05B	JIME
43.Naphthalene	U		µg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22:00:21	V122006B	JME
44, n-Propy/benzene	U		pg/L	1.0	1.0	04/05/22	VI22005B	04/05/22 00:21	VI22006B	JM
45. Styrena	U		µg/L	1.0	1.0	04/05/22	VI22005B	04/06/22 00:21	VI220058	JM
45.1,1,1,2-Tetrachloroethane	U		µg/L	1.0	3.0	04/05/22	VI22D05B	04/06/22 00:21	V122D06B	JM
47,1,1,2,2-Tetrachtoroethane	N.		pg/L	1.0	1.0	04/05/22	VI22005B	04/06/22 00:21	V (220)058	JM
48, Tetrachioroethene	U		µg/L	1.0	1,0	04/05/22	VI22005B	04/06/22 00:21	V122D06B	JM
49. Toluene	U		µg/L	1,0	1.0	04/05/22	V122D05B	04/06/22 00:21	VI22D068	JM
50.1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	V 122006B	JM
51.1,1,1-Trichloroethane	U		pg/L	10	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22005B	JM
= 52,1,1,2-Trichloroethane	U		PD/L	100	1.0	04/05/22	VI22D05B	04/06/22 00:21	V122D05B	JM
53. Trichloroethene	U		µg/L	1.0	1.0	04/05/22	V122005B	04/06/22:00:21	V1220058	JME
54. Trichkroftuorome thane	U		pp/i_	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	V122006B	JAM
55.1,2,3-Trichloropropane	U		µg/L	1.0	5.0	04/05/22	VI22005B	0496/22 00:21	V122006B	JM
56.1,2,3-Trimethylbenzene	U		pg/L	1.0	1.0	04/05/22	V122D05B	04/06/22 00:21	V122006B	JM
57. 1.2.4-Trimethylbenzene	-0		ug/t.	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	V122D06B	JM
58.1,3,5-Trimethylbenzene	Ð		pg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	V122D05B	JIM
59, Vinyl Chiodde	:8		µg/L	1.0	3.0	04/05/22	VI22005B	04/06/22 00:21	V122D058	am
60. māp-Xylene	,U		ug/L	2.0	9.0	04/05/22	VIZ2D05B	04/05/22 00:21	V/22006B	JM
61.o-Xylane	U		HOL	1.0	1.0	04/05/22	VI22005B	04/06/22/00:21	V122D058	JM
F 62 Xylenes	υ		po/L	3.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	V122D05B	JMF



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Client Identification: Arcadis U.S., Inc. - Nov! Sample Description: OW-16D2_040422 Chain of Custody: 201041
Client Project Name: TRW Milliord ZF Active Salety Sample No: Collect Date: 04/04/22

(30046730) Sample Mains: Ground Water Collect Time: 11:55

Sample Comments:

Client Project No.

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable :: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS
Alliquot ID: A07755-002 Matrix: Ground Water
Method: EPA 5030C/EPA 8260D
Description: OW-16D2_040422
Preparation A

Parameter(s)	Result	a	Units	Reporting Limit	Dilution	Prepa P. Date	ration P. Batch	An Date	alysis A. Balch	init
1,Acetone	U.		pg/L	150	1.0	04/05/22	VI22D05B	04/06/22 02:59	V1220058	JM
1 2.Acrylontinie	U		pp/L	2.9	1.0	04/05/22	V122D05B	04/05/22 02:59	V1220058	JM
3. Bergene	U		µg/L	1.0	1.0	04/05/22	VI22005B	04/05/22 02:59	V (220058	JMP
4. Bromobenze ne	U		PQ/L	1.0	1,0	04/05/22	V122D05B	04/06/22 02:59	V122D05B	JIME
5. Bromochioromethare	Ü		HO'L	1.0	1.0	04/05/22	V22005B	04/05/22 02:59	V/22005B	JM
6. Bromodichloromethane	U		HD/E	1.0	1.0	04/05/22	V122D05B	04/06/22 02:59	V122005B	JM
7. Bromoform	U		HQ/L	1.0	1.0	04/05/22	V122005B	04/06/22 02:59	V (220059	JM
8. Bromomethane	u	¥-	h0/L	5.0	1.0	04/05/22	V122D05B	04/06/22 02:59	V1220058	JM
9.2-Butanore	U		pg/L	25	1.0	04/05/22	VI22D05B	04/06/22 02:59	V1220058	JM
10. n-Bulylbenzene	0		Hg/L	1.0	1.0	04/05/22	V122D05B	04/06/22 02:59	V122005B	JM
11, sec-Buly/benzene	U		µg/L	1.0	1.0	04/05/22	V122005B	04/06/22 02:59	V1220059	JM
12, terl-Buty/berzene	U		HQ/L	1.0	1.0	04/05/22	V122D05B	04/05/22 02:59	V/22005B	JM
13. Carbon Disulfide	U		pp/L	5.0	1.0	04/05/22	V122D05B	04/05/22 02:59	V122005B	JM
14. Carbon Tetrachloride	U.		pg/L	1.0	1.0	04/05/22	V122D05B	04/05/22 02:59	V122D05B	JM
15. Chloroberzene	U		µg/L	1.0	1.0	04/05/22	VI22005B	04/06/22 02:59	V/22005B	.IM
16. Chiorpe thane	Ü		µg/L	5.0	1,0	04/05/22	VI22005B	04/06/22 02:59	V122005B	JM
17, Chloroform	H		pg/L	1.0	1.0	04/05/22	V122D05B	04/05/22 02:59	V122D05B	JM
18. Ohloromethane	U	M-	pg/L	5.0	1.0	04/05/22	V122D05B	04/06/22 02:59	V122005B	JM
19.2-Chlorotatuene			pg/L	50	1.0	04/05/22	VI22D05B	0406/22 02:59	V1220058	JM
20.1,2-Dibromo-3-chloropropane (SIM)	U		pg/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 02:59	V 122005B	JM
21, Dibromochipromethane	U		µg/L	5.0	1.0	04/05/22	VI22005B	04/06/22 02:59	V1220059	JM
22. Dibromomelhane	U		pp/L	5.0	1.0	04/05/22	VI22D05B	04/05/22 02:59	V (220058	JM
23. 1,2-Dichlorobenzene	U		µg/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 02:59	V122005B	JM
24.1.3 Dichlorobenzene	U		HQ/L	1.0	1.0	04/05/22	VI22005B	94/06/22 92:59	V122D058	JM
25. 1,4 Dichicropenzene	Ü		HOYL	1.0	1.0	04/05/22	V122D06B	04/06/22 02:59	V (22005B	JIM
26. Dichlorodifluoromethene	0		HD/L	5.0	1.0	04/05/22	V122D05B	04/05/22 02:59	V122005B	JM
27.1,1-Dichie celhane	3.5		pg/L	10	1.0	04/05/22	V122D05B	04/05/22 02:59	V122D05B	JM
28.1,2-Dichloroethane	U		pg/L	1.0	1.0	04/05/22	V122D05B	04/06/22 02:59	V/22/005B	JIM
29.1,1-Dichiproelhene	Ш		pg/L	1.0	1.0	04/05/22	VI22005B	04/06/22 02:59	V1220058	JM
30. cls-1,2-Dichioroethene	19		PD/L	1.0	1.0	04/05/22	V122D05B	04/05/22 02:59	V122005B	JM
31, trans-1,2 Dichloroethene	1.7		pg/L	1.0	1.0	04/05/22	V122D05B	04/06/22 02:59	V122005B	JM
32.1,2 Dichloropropane	Ш		pp/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 02:59	V1220058	JM
33, cis-1,3-Dichioropropene	D		hD/r	0.50	1.0	04/05/22	VI22005B	04/05/22 02:59	V (22D058	JM
34. trans-1;3-Dichioropropene	Ü		HQ/L	0.60	1,0	04/05/22	VI22005B	04/05/22 02:59	V122D05B	JIM
36. Ethybercane	ш		(4 1 /1	10	1.0	04/05/22	VI22005B	04/05/22 02:58	V1220058	JM
36. Ethylene Dibromide	υ		HD/L	120	1.0	04/05/22	V122D05B	04/06/22 02:59	V122D05B	JM

1914 Hollaway Drive 11766 E. Grand River 8660 S. Mackingw Trail Holt, MI 48842 Brighton, MI 48116 Codillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368 F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584



Order. Page: Date:

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Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2 040422

Chain of Custody:

201041

Client Project Name: TRW Millord ZF Active Safety

Sample No:

Collect Date:

04/84/22

Client Project No:

(30046730) 30046738

Sample Matrix:

Ground Water

Collect Time:

11:55

Sample Comments:

Definitions:

Q: Qualifler (see definitions at end of report) NA: Not Applicable +: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Method: EPA 5030C/EPA 8260D

Allquot ID:

A07755-002

Mairtx: Ground Water

Description: OW-16D2_040422

						Prepa	ration	An	alysis	
Parameter(s)	Result	0	Units	Reporting Limit	Dilutton	P. Dale	P. Batch	A. Date	A. Batch	init
37.2-Hexanone	U		pgt	50	1.0	04/05/22	VI22005B	04/06/22 02:59	V/220059	JMF
38. isopropyibenzene	U		µg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	V122005B	JME
39, 4-Melhyl-2-pentanone	U		pg/L	50	1.0	04/05/22	V122D05B	04/05/22 02:59	V122D05B	JMF
40. Methylene Chloride	U		pg/L	5,0	1.0	04/05/22	V122D05B	04/06/22 02:59	V122005B	JMF
# 41, 2-Melnymaphthalene	U		pg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	V122D058	JMF
42.MTBE	U		µg/L	5.0	1.0	04/05/22	VI22D05B	04/05/22 02:59	VI22D05B	JMF
43. Naphihalene	U		µg/L	5.0	1.0	04/05/22	VI22005B	04/06/22 02:59	V122005B	JAN
44, n-Propylberizane	LI LI		pg/L	1.0	1.0	04/05/22	VI22D05B	04/05/22/02:59	V1220058	JME
45. Styrene	U		µg/L	1.0	Y.D.	04/05/22	VI22D05B	04/05/22 02:59	V122005B	JME
45.1.1,1.2 Tetrachloroethane	U		HQ/L	1.0	1.0	04/05/22	V122D05B	04/06/22 02:59	V122D05B	JIME
47. 1,1,2,2-Tetrachloroethane	0		µg/L	1.0	1.0	04/05/22	V122D05B	04/05/22 02:59	V/22005B	JIME
49. Tetrachioroethene	U		µg/L	1.0	1.0	04/05/22	V122D05B	04/05/22 02:59	V122D05B	JME
49. Toklene	U.		pp/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 02:59	V122D05B	JIME
50.1,2,4-Trichiorobetzene	U		HQYL	5.0	1.0	04/05/22	VI22D05B	04/05/22 02:59	V/22/005B	JIME
51, 1,1,1-Trichloroethane	U		pg/L	1.0	1.0	04/05/22	V122D05B	04/06/22 02:59	V1220059	JM
1 52.1,1,2-Trichloroethane	U.		pg/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 02:59	V122D05B	JMF
53. Trichloroethene	U		HAT	10	1.0	04/05/22	V122005B	04/06/22 02:59	V122005B	JMF
54. Trichlorofluoromethane	U		µg/L	1.0	1.0	04/05/22	VI22005B	04/06/22 02:59	V122005B	JIME
55. 1,2,3-Trichloropropane	U		µg/L	1.0	1.0	04/05/22	VI22005B	04/05/22 02:59	V1220059	JIME
1 56.1,2,3-Trimethylbenzene	Ü		µg/L	1.0	1.0	04/05/22	VI22005B	04/06/22 02:59	V122D06B	JMF
57.1,2,4-Trime thytoenzene	U		HD/L	10	1.0	04/05/22	VI22D05B	04/05/22 02:59	V122D058	JIME
58.1,3,5-Trimethylbenzene	U		pg/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 02:59	V122005B	JMF
59.Vinyi Chloride	U		pg/L	1.0	1.0	04/05/22	V122005B	04/06/22 02:59	V1220058	JIME
50.m&p-Xylene	ш		pp/L	2.0	1.0	04/05/22	VI22D05B	04/05/22 02:59	V1220058	JME
61.o-Xylene	U		µg/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 02:59	V122005B	JM
1 62.Xylenes	ti.		pg/L	3.0	1.0	04/05/22	V122D05B	04/06/22 02:59	V122006B	JM



Order. Page: Date:

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Client Identification: Arcadis U.S., Inc. - Novi

Sample Description: EQUIPMENTBLANK_040422

Chain of Custody:

201041

Client Project Name: TRW Milliord ZF Active Safety

Sample No:

Collect Date:

04/84/22

Client Project No.:

(30046730)

Sample Matrix:

Blank: Equipment

Collect Time:

12:10

Sample Comments:

Definitions:

Q: Clualifler (see definitions at end of report) NA: Not Applicable #: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Method: EPA 5030C/EPA 9260D

30046738

Allquot ID:

A07755-003

Maurk: Blank: Equipment

Description: EQUIPMENTBLANK_040422

Parameter(s)	Result	0	Units	Reporting Limit	Dilution	Prepa P. Dale	ration P. Balch	A. Date	A. Batch	ini
T.Acetone	U		pyL	50	1.0	04/05/22	VI220058	04/05/22 00:48	V /22005/9	JW
2.A crylonitrie	U		µg/L	2.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	V122005B	JN
3. Bergene	Ш		pg/L	1.0	1.0	04/05/22	V122D05B	04/05/22 00:48	V122D05B	JN
4. Bromobenze ne	ш		pg/L	1.0	1.0	04/05/22	V122D05B	04/06/22 00:48	V122005B	JA
5. Bromochkromethane	U		pp/L	10	1.0	04/05/22	VI22D05B	04/06/22 00:48	V122D058	JA
6. Bromodicnioromethane	U		pg/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 00:48	V/22005B	JH
7. Bromotom	U		MB/T	1.0	1.0	04/05/22	VI22005B	04/06/22 00:48	V (22005B	J
8. Bromome marie	Ш	V-	pg/L	5.0	1.0	04/05/22	VI22D05B	04/05/22 00:48	V1220058	ال
9.2-Butanone	ш		µg/L	25	1.0	04/05/22	V122005B	04/06/22 00:48	V1220059	J
10. n-Buty/benzene	U		pg/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 00:48	V/22005B	JI
11.sec-Buly/benzene	U		HD/I	1.0	1.0	04/05/22	V122D05B	04/06/22 00:48	V 122005B	J
12, teri-Buty/benzene	ш		pp/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 00:48	V (220058	ال
13, Carbon Disuttide	U		µg/L	5.0	1.0	04/05/22	VI22005B	04/05/22:00:48	V/220068	J
14. Carbon Tetrachloride	U		Pg/L	1.0	1.0	04/05/22	VI22005B	04/05/22 00:48	V122D05B	a a
15. Ohlombergene	U		pp/L	10	1.0	04/05/22	VI22005B	04/05/22 00:48	V1220058	
16. Chloroethane	0		HD/E	5.0	1.0	04/05/22	V122D05B	04/06/22 00:48	V122005B	1
17, Chloroform	U		µg/t.	1.0	1.0	04/05/22	V122005B	94/06/22 00:48	VI220059	9
18. Onloromethane	U	٧-	HQ/L	5.0	1.0	04/05/22	V122D05B	04/05/22 00:48	V/22005B	J.
19.2-Chlorotoluene	U		MOVL	5.0	1,0	04/05/22	VI22005B	04/06/22 00:48	V1220058	J
20.1,2-Dibromo-3-chieropropane (SIM)	U		pgr.	1.0	1.0	04/05/22	V122D05B	04/05/22 00:48	V122D05B	4
21. Dibromochipromethane	ü		pg/L	5.0	1.0	04/05/22	V122005B	04/06/22 00:48	VI22005B	
22. Dibromomethane	U		µg/L	5.0	1.0	04/05/22	VI22005B	04/06/22 00:48	V122005B	J
23.1,2-Dichlorobenzene	U		µg/L	1.0	1.0	04/05/22	VI22005B	04/05/22 00:48	V/22005B	
24.1,3-Dichloropenzene	U		HQYL.	1,0	1.0	04/05/22	V122D05B	04/06/22 00:48	V 122005B	J.
25. 1,4-Dichiorobenzene	U		HD/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	V1220058	J
26. Dichlorodifluoromethane	U		pg/L	5.0	1.0	04/05/22	VI22D05B	04/05/22 00:48	V122005B	9
27, 1,1-Dichioroethane	U		pg/L	1.0	1.0	04/05/22	V122005B	04/06/22 00:48	V1220058	all
28.1,2-Dichioroethane	U		pp/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 00:48	V1220058	d
29. I ,1-Dichloroethene	11		µp/L	1.0	1.0	04/05/22	VI22005B	04/05/22 00:48	V122005B	J
30, cis-1,2-Dichloroethene	U		Hg/L	1.0	1.0	04/05/22	VI22005B	04/05/22 00:48	V122D05B	· g
31, trans-1,2-Dichloroetherie	Ü		MD/L	1.0	1.0	04/05/22	V122005B	04/05/22 00:48	V/22005B	
32, 1,2-Dichloropropane	U		µg/L	1.0	1,0	04/05/22	VI22005B	04/06/22 00:48	V122005B	J
33. ds-1,5 Dichloropropena	U		pg/L	0.50	1.0	04/05/22	V122D05B	04/05/22 00:48	V122D05B	
34. frans-1,3-Dichloropropene	U		pg/E	0.50	1.0	04/05/22	V122D05B	04/06/22 00:48	V122005B	
35. Ethylbenzene	U		pg/L	1.0	1.0	04/05/22	V122005B	04/06/22/00:48	V1220059	J
36. Ethylene Dibromide	U		pg/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 00:48	VI22005B	J

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail

Holt, MI 48842 Brighton, Mi 48116 Cadillac MI 49601

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F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584



Order: Page: Date:

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Client Identification: Arcadis U.S., Inc. - Novi Sample Description.

EQUIPMENTBLANK 040422

Chain of Custody:

201041

Client Project Name: TRW Milliord ZF Active Salety (30046730)

Sample No:

Collect Date:

04/04/22

Client Project No: 30046730

Sample Matrix

Blank: Equipment

Collect Time:

12:10

Sample Comments:

Detritions:

Q: Qualifier (see definitions at end of report) NA: Not Applicable #: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Method: EPA 5030C/EPA 9260D

Afiquot ID:

A07755-003

Matrix: Blank: Equipment

Description: EQUIPMENTBLANK 040422

				-		Prepa	ration	An	alysis	
Parameter(s)	Result	0	Little	Reporting Limit	Deutlon	P. Date	P. Batch	A Date	A. Batch	Init
37 . 2-Hexanone	n		pg/L	50	1.0	04/09/22	VIII2005B	04/05/22 00:48	V122D068	JM
38. sapropyiberzene	U		µg/L	5.0	1.0	04/05/22	V122D05E	04/05/22 00:48	V122005B	JM
39. 4-Methyl-2-pentanone	U		pg/L	60	1.0	04/05/22	V122005B	04/05/22 00:48	A1550028	JME
40, Methylene Chloride	Ti.		µg/L	5.0	1,0	64/05/22	V(22D05B	04/06/22 00:48	V (22D)06B	JM
I 41.2-Methylnaphthalene	U		pg/L	5.0	1.0	04/05/22	V122D058	04/06/22 00:48	V122D058	JM
42.MTBE	Ü		µg/L	5.0	1.0	04/05/22	VI22D05B	04/05/22 00:48	V122006B	JMF
43. Naphthalene	U		pg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	V122D058	JME
44.n-Propyiberzene	U		µg/L	1.0	1,0	04/05/22	VI22D05B	04/06/22 00:48	V122D05E	JM
45. Styrene	ш		pg/L	10	1.0	04/05/22	VI22005B	04/06/22 00:48	V 122005B	JM
46.1,1,1,2-Tetrachloroethane	Ü		pg/L	1.0	1.0	04/05/22	V(22D05B	04/05/22 00:48	V122006B	JM
47.1,1,2,2-Tetrachioroethane	n		µg/L	1.0	1.0	04/05/22	VI22D058	04/05/22 00:48	V122006B	JM
48. Tetrachioroethene	U		µg/L	1.9	1.0	04/05/22	VI22D05B	04/06/22 00:48	V122005B	JM
49. Toluene	U		pg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:49	V122005B	JIME
50, 1,2,4-Trichioroberizene	U		µg/L	5.0	1.0	04/05/22	V122D058	04/05/22 00:48	V122D05B	JM
51.1,1,1-Trichvoroethane	U		μg/L	1.0	1.0	04/05/22	VI22005B	04/05/22 00:48	V122D05B	JM
1 52.1,1,2-Trichioroethane	·U		µg/L	1.0	1.0	04/05/22	V122D05B	04/05/22 00:48	V122D05B	JM
53. Trichiorcethene	U		pg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	V (22D06B	JMG
54. Trichioroffuoromethane	U		µg/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 00:48	V122006B	JM
55, 1,2,3-Tricmeropropane	U		μg/L.	1.0	1.0	04/05/22	V122D05B	04/05/22 00:48	V122005B	JMR
# 56.1,2,3-Trimethylbenzene	U		µg/L	1.0	1.0	04/95/22	V122D05B	04/06/22 00:48	V (22D05B)	JM
57.1,2,4-Trimethylbenzene	U		pg/L	1.0	1.0	04/05/22	V122D058	04/06/22 00:48	V122D058	JM
58, 1,3,5-Trime trylbenzene	Ü		µg/L	1.0	1,0	04/05/22	VI22005B	04/05/22 00:48	V122D06B	JM
59.Vinyl Chloride	n		µg/L	1.0	1,0	04/05/22	V122D05B	04/05/22 00:4E	V122D05B	JM
60.map-Xylene	п		pg/L	2.0	1.0	04/05/22	V122D05B	04/06/22 00:48	V1220058	JM
61. o-Xylene	U		pg/L	10	1.0	04/05/22	VI22005B	04062200:48	V 122D05H	JM
# 62.Xylenes	U		µg/L	3.9	1.0	04/05/22	V122D05B	04/05/22 00:48	V122D05B	JM



Order: Page: Date: A07758 8 of 10 04/06/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: TRIP BLANK Chain of Custody: NA Client Project Name: TRW Milliord ZF Active Salety Sample No: Collect Date: 04/04/22 (30046730) Client Project No: Collect Time: 30046738 Sample Matrix: Blank: Trip NA. Sample Comments: Definitions Q: Qualifler (see definitions at end of report) NA: Not Applicable +: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Allquot ID: A07755-004 Matrix: Blank: Trip
Method: EPA 5030C/EPA 9260D Description: TRIP BLANK

Method: EPA 5030G EPA 82500				Des	cription:	HIP BLANK				
Parameler(s)	Result	a	Units	Reporting Limit	Dilutton	Prepa P. Date	ration P. Balon	An Date	alysis A. Batch	init
T.A cetone	U		port	50	1.0	04/05/22	VI22005B	04/06/22 01:14	V/22005/8	JMF
2.A crylonitrie	Ü		pg/L	2.0	1.0	04/05/22	VI22D05B	04/06/22/01:14	V122005B	JMF
3. Bergene	H		pg/L	1.0	1.0	04/05/22	V122D05B	04/05/22 01:14	V122D05B	JIME
4. Bromobenze ne	ш		µg/L	1.0	1.0	04/05/22	V122D05B	04/06/22 01:14	V122005B	JME
5. Bromochloromethane	U		pp/L	10	1.0	04/05/22	VI22D05B	0406/22/01:14	V122D058	JME
6. Bromodicnioromethane	U		pg/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 01:14	VI220058	JIME
7. Bromotom	U		MB/T	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	V122005B	JMF
8. Bromome thane	Ш	V-	ppr	5.0	1.0	04/05/22	VI22D05B	0405/22 01:14	V122005B	JME
9.2-Butanone	ш		jig/L	25	1.0	04/05/22	VI22005B	0406/22/01:14	V1220059	JMF
10.n-Butylbenzene	U		pig/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 01:14	VI220058	JMF
11. sec-Buly/benzene	U		HB/I	1.0	1.0	04/05/22	V122D05B	04/06/22 01:14	V122005B	JANE
12.teri-Buty/benzene	ш		pp/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 01:14	VI220058	JME
13. Carbon Disumde	U		MB/F	5,0	1.0	04/05/22	VI22005B	04/05/22/01:14	V/220069	JMF
14. Carbon Tetrachloride	U		Fig/L	1.0	1.0	04/05/22	VI22005B	04/05/22 01:14	V122D06B	JIME
15. Chloroberzene	U		PD/L	10	1.0	04/05/22	VI22D05B	0405/22/01:14	V1220058	JMF
16. Chloroe thane	0		HD/L	5.0	5.0	04/05/22	V122D05B	84/05/22/01:14	V1220058	JMF
17, Chloroform	U		pg/t.	1.0	0.7	04/05/22	V122005B	04/05/22/01:14	VI22D059	JIME
18. Chioromethane	U	V-	PD/L	5.0	1.0	04/05/22	VI22D05B	04/05/22 01:14	V/22005B	JMF
19. 2-Chlorotoluene	U		HQ/L	5.0	1.0	04/05/22	VI22005B	0406/22 01:14	V1220058	JME
1 20.1,2-Dibromo-3-chiotopropane (SIM)	U		ppn.	(1.0	1.0	84/05/22	V122D05B	0405/22/01:14	V122D05B	JIME
21. Dibromochipromethane	ü		PD/L	5.0	1.0	04/05/22	V122005B	04/06/22/01:14	V122006B	JAAF
22. Dibromomethane	U		HQ/L	5.0	1.0	04/05/22	VI22005B	04/06/22 01:14	V122005B	JM
23.1.2-Dichloropenzene	U		µg/L	1,0	1.0	04/05/22	VI22005B	04/05/22/01:14	V/22D05B	JMF
24.1,3-Dichlorobenzene	U		µg/L	1.0	1.0	04/05/22	V122D05B	04/06/22 01:14	V 122005B	JME
25. 1,4-Dichiorobenzene	U		PD/L	10	1.0	04/05/22	VI22D05B	04/06/22 01:14	V122D058	JIME
26. Dichlorodifluoromethane	U		pg/L	5.0	1.0	04/05/22	VI22D05B	04/05/22 01:14	V/22005B	JMF
27.1.1-Dichioroethane	U		pg/L	1.0	1.0	04/05/22	VI22005B	04/06/22/01:14	V1220059	JIME
28.1,2 Dichloroethane	U		pg/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 01:14	V1220058	JME
29. I ,1-Dichloroethene	U.		pp/L	1.0	1.0	04/05/22	VI22D05B	04/05/22/01:14	V122005B	JAME
30, cts-1,2-Dichloroethene	U		Pg/L	1.0	1,0	04/05/22	VI22005B	04/05/22/01:14	V122D05B	JIME
31, trans-1,2-Dichloroethene	U		hB/L	1.0	1.0	04/05/22	VI22005B	04/05/22 01:14	V/22005B	JIME
32; 1,2-Dichloropropane	U		µg/L	1.0	1,0	04/05/22	VI22005B	04/06/22 01:14	V122005B	JMF
33. dis-1,5-Dictrioropropens	U		pg/L	0.50	1.0	04/05/22	V122D05B	0405/22/01:14	V122D05B	JIME
34. trans-1,3-Dichioropropene	U		µg/L	0.50	1.0	04/05/22	V122D05B	04/06/22 01:14	V122005B	JMF
35. Ethylbenzene	U		pg/L	1.0	1.0	04/05/22	VI22065B	0406/22 01:14	V1220059	JME
36. Ethylene Dibromide	U		pg/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 01:14	VI22005B	JMF

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Order: Page: Date:

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Client Identification: Arcadis U.S., Inc. - Novi Sample Description: TRIP BLANK Chain of Custody: Client Project Name: TRW Milford ZF Active Safety Sample No: Collect Date:

04/04/22

(30046730) Client Project No: 30046730

Sample Matrix:

Collect Time:

NA.

N/A

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable #: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC MS Method: EPA 5030C/EPA 9260D

Aliquot ID: A07755-004

Blank: Trlp

Mairtx: Blank: Trip

Description: TRIP BLANK

Paramelerisi	Result	o	Onits	Reporting Limit	Dilutton	Prepa P. Date	ration P. Batch	A. Dele	alysis A. Balch	inti
37.2-Hexenone	U	27	pol	50	1.0	04/05/22	VI220058	04/05/22 01:14	2000 E 200	JM
	-11		109/3	1200	277	0.2725	(1/2/47/2527)	THE RESERVE OF THE PERSON NAMED IN	AND REAL PROPERTY.	12500
39. isopropylberizene	U		µg/L	5.0	1.0	04/05/22	VI22D05B	04/05/22 01:14	unertable of Reside	-
39. 4-Methyl-2-pentanone	U.		pg/L	50	1.0	04/05/22	V122005B	04/06/22 01:14		3411
40 Methylene Chloride	U.		pg/L	5.0	1.0	04/05/22	V122D05B	04/05/22/01/14	- 150 miles	
2 41_2-Methylnisinthalene	U		DOM:	5.0	1.0	04/05/22	V122D06B	04/05/22 01:14	MA DESCRIPTION	11/2000
42.MTBE	U		PD/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	V122D05B	JM
43. Naphthalene	U.		HQ/L	5.0	1.0	04/05/22	V122D05B	0405/22 01:14	V/22D05B	JM
44.h-Propyiberzene	U		HOLD	1.0	1.0	04/05/22	V122D05E	0406/22 01:14	V122005E	JM
45. Styrene	U		HQ/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 01:14	V122D058	JM
46.1,1,1,2 Tetrachlomethane	U		pg/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 01:14	V122D05E	JM
47.1.1,2,2 Tetrachloroetnane	U-		PDYL	1.0	1.0	04/05/22	V122D058	04/05/22/01:14	V1220056	JM
48. Tetrachioroetherie	U		pg/L	1.0	1.0	04/05/22	V122D05B	04/05/22/01:14	V122D05B	JM
49. Toluene	U		PD/L	1.0	1.0	04/05/22	VI22005B	04/06/22 01:114	V122D05B	JM
50, 1,2,4-Trichioroperagene	U.		pg/L	5.0	1.0	04/05/22	V122D05B	04/05/22 01:14	V1220058	JM
51.1,1,1-Trichloroethane	U		pg/L	1.0	1.0	04/05/22	V122D05B	04/06/22 01:14	V4220068	JM
£ 52.1,1,2-Trichloroethane	U		pgy	1.0	1.0	04/05/22	VI22005B	04/05/22 01:14	V122005B	JM
53. Trichiorpethene	U		MO/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 01:14	V(22D05B	JM
54. Trichiorofluoromethane	U		pt/L	1.0	1.0	04/05/22	VI22D05B	04/06/22/01:14	V122D068	JM
55.1,2.3-Trichloropropane	U		pg/L	3.0	1.0	04/05/22	V122005B	04/06/22 01:14	V122D058	JM
56.1,23-Trime Invibenzene	U.		HQ/L	1.0	1.0	04/05/22	V122D05B	04/06/22 01:14	VI22D059	JM
57.1.2.4-Trime Invibenzene	U		DOL.	7.0	1.0	04/05/22	V122006B	04/05/22 01:14	V1220068	JM
58.1.3.5-Trimethylpenzene	U		PD/L	1.9	1.0	04/05/22	VI22D05B	04/05/22 01:14	V122005B	JM
59.V Invi-Chioride	EF.		po/L	7.0	1.0	04/05/22	VI22D05B	04/05/22 05:14	V122D06EI	JIM
50. māp-Xyliene	U		pg/L	2.0	1.0	04/05/22	V122D05E	0406/22/01:14	AND THE PERSON NAMED IN	JM
51.o-Xyvonie	U		HQ/L	1.0	1.0	04/05/22	VI22D05B	or all the original to	NUMBER STATES	
62.Xylenes	Ð		HQ/II	3.0	1.0	04/05/22		04/05/22/01:14	and the second	200



Analytical Laboratory Report Laboratory Project Number: A07755

A07755 Order: Page: 10 of 10 Date: 04/05/22

Definitions/ Qualifiers:

- A: Spike recovery or precision unusable due to dilution.
- B: The analyte was detected in the associated method blank.
- E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
- J: The concentration is an estimated value.
- M: Modified Method
- U: The analyte was not detected at or above the reporting limit.
- X: Matrix Interference has resulted in a raised reporting limit or distorted result.
- W: Results reported on a wet-weight basis.
- *: Value reported is outside QC limits

Exception Summary:

: Recovery in the associated laboratory sample (LCS) exceeds the lower control limit. Results may be blased low.

: Recovery in the associated continuing calibration verification sample (CCV) exceeds the lower control limit. Results

may be blased low.

Analysis Locations:

All analyses performed in Holt.



Accreditation Number(s):

T104704518-19-8 (TX)



Order ID: A07755 Page: 1 of 5 Date: 04/06/22

VI22D05B: Method Blank (MB) EPA 8260D

Run Time: VI22D05B.MB 04/05/2022 23:54 [VI22D05B]				L/ // 0200
	MB Result M	IB MB RDL			
	C	qualifier			
Analyte	µg/L	µg/L			
Acetone	U	50			
Acrylonitrile	ü	2.0			
Benzene	U	1.0			
Bromoberizene	Ü	1.0			
Promochloromethane	U	1.0			
Promodichiorome thane	U	1.0			
Bromatorm	U	1.0			
Bromomethane	U	5.0			
2-Butanone	U	25			
n-Bulylberzene	U	1.0			
sec-Bulylberizene	U	1.0			
ert-Butylberizene	U	1.0			
Carbon Disuifide	U	5.0			
Carbon Tetrachloride	U	1.0			
Chloroberzene	U	1.0			
Chloroethane	U	5.0			
Chloraform	U	1.0			
Chloromethane	U	5.0			
2-Chilorotoluene	U	5.0			
1,2-Dibromo-3-chioropropane (SIM)	Ü	1.0			
Dibromochloromethane	U	5.0			
Dibromomethane	U	5.0			
1,2-Dichlorobenzene	U	1.0			
,3-Dichlorobenzene	U	1.0			
1,4-Dichloroberizerie	U	1.0			
Dichlorodifluoromethane	U	5.0			
1,1-Dichloroethane	U	1.0			
1,2-Dichloroethane	U	1.0			
i,t-Dichloroethene	U	a.i			
ds-1,2-Dichloroethene	U	1.0			
rans-1,2-Dichloroethene	U	1.0			
,2-Dichloropropane	U	1.0			
ds-1,3-Dichloropropene	U	0.50			
	1914 Holloway Drive	Holt, MI 48842	T: (517) 699-0345	F: (517) 699-0388	
	(1700 C 180	0.5-1 101 40142	T (0)(0) 220 2200	C (010) 220 2211	

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368 F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584

DOSID: G-6017.2 (06/10/2020)

lab@fibertec.us

RBN: V122D058-22960406123105



Order ID: A07755 Page: 2 of 5 Date: 04/06/22

VI22D05B; Method Blank (MB) EPA 8260D

Run Time: VI22D05B.MB 04/05/2022 23:	MB Result MB	MB RDL			
	Qualifie				
Analyte	µg/L	µg/L			
rans-1,3-Dichioropropene	U	0,50			
Ethylberzene	U	1.0			
Ethylene Dibromide	U	1.0			
2-Hexanone	U	50			
sopropylberizene	U	5.0			
4-Methyl-2-pentanone	Ü	50			
Methylene Chloride	U	5.0			
2-Methylnaphthalene	u	5.0			
MTBE	U	5.0			
Naphthalene	U	5.0			
n-Propylbenzene	Ü	1.0			
Styrene	U	1.0			
1,1,1,2-Tetrachioroethane	U	1.0			
1,1,2,2-Tetrachioroethane	U	1.0			
Tetrachioroethene	Ü	1.0			
Toluene	U	1.0			
1,2,4-Trichloroberzene	U	5.0			
1,1,1-Trichloroethane	U	1.0			
1,1,2-Trichloroethane	U	1.0			
Trichloroethene	U	1.0			
Trichiorofluoromethane	U	1.0			
1.2.3-Trichloropropane	U	1.0			
1,2,3-Trimethylberizene	Ü	1.0			
1.2,4-Trimethylbenzene	U	1.0			
1,3,5-Trimethylbenzene	U	1.0			
Vinyl Chloride	U	1.0			
m&p-Xyliene	U	2.0			
o-Xylene	U	1.0			
4-Bromofluorobenzene(S)	100	90-120			
Dibromofluoromethane(S)	101	80-120			
1,2-Dichloroethane-d4(S)	94	80-120			
Taluene-d9(S)	99	80-120			
	1914 Holloway Drive	Holt, MI 48842	T: (517) 699-0345	F: (517) 699-0388	

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail

Holt, MI 48842 Brighton, MI 48116 Cadilloc, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368 F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584

DCSID: G-6017.2 (06/10/2020)

lab@fibertec.us

RSN: V122D058-22960406123105



Order ID: A07755 Page: 3 of 5 Date: 04/06/22

VI22D05B: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VI22D06B.LCS: 04/05/2022 22:09	a real of the second						200	1000	diam'r.	-	- There is not an	
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Amoun				Qualifier	Spike Amount		Rec.	Qualifler			Qualifier
Analyte	µg/L	µg/L	%	%		µg/L	µg/L	%		%	%	
Acetone	50.0	30.6	61	54-140		50.0	31.1	62		2	20	
Acrylonitrile	50.0	52.7	105	70-130		50.0	53.7	107		2	20	
Berizene	50.0	45.5	93	80-120		50.0	45.1	90		3	20	
Bromobenzene	50.0	44.7	89	75-125		50.0	44.2	88		1	20	
Bromochloromethane	50.0	40.7	81	70-130		50.0	40.1	80		1	20	
Bromodichiorome thane	50.0	44.5	88	75-120		50.0	43.5	87		2	20	
Bromoform	50.0	45.8	92	70-130		50.0	45.4	91		1	20	
Bromomethane	50.0	27.5	55	69-135	•	50.0	29.1	58		5	20	
2-Butanone	50.0	40.1	80	70-148		50,0	40.5	81		1	20	
n-Butylberzene	50.0	52.8	106	70-133		50.0	51.9	104		2	20	
sec Butylbenzene	50.0	50.2	100	70-125		50.0	49.4	99		1	20	
ert-Butytbenzene	50.0	49.5	99	70-130		50.0	48.6	97		2	20	
Carbon Disulfide	50.0	44.6	89	70-130		50.0	42.8	86		3	20	
Carbon Tetrachloride	50.0	44.5	89	70-130		50.0	43.3	87		2	20	
Chloroberzene	50.0	45.9	92	80-120		50.0	44.8	90		2	20	
Chloroethane	50.0	40.5	81	61-130		50.0	39.1	78		4	20	
Chloroform	50.0	44.2	88	80-120		50.0	43.4	87		1	20	
Chloromethane	50.0	38.4	77	67-125		50.0	38.9	78		1	20	
2-Chlorotoluene	50.0	47.3	95	75-125		50.0	45.6	93		2	20	
1,2-Dibromo-3-chioropropane (SIM)	50.0	48.5	97	70-130		50.0	49.6	99		2	20	
Dibromochloromethane	50.0	44.5	89	70-130		50.0	43.3	87		2	20	
Dibromomethane	50.0	41.6	83	75-125		50.0	40.4	81		2	20	
1,2-Dichloroberzene	50.0	46.9	94	70-120		50.0	45.2	92		2	20	
1,3-Dichloroberizene	50.0	45.8	92	75-125		50.0	45.0	90		2	20	
i,4-Dichlorobertzene	50.0	43.3	87	75-125		50.0	42.5	85		2	20	
Dichlorodfluoromethane	50.0	53.5	107	70-136		50.0	51.0	102		5	20	
1,1-Dichloroethane	50.0	45.9	92	70-130		50.0	44.5	89		3	20	
,2-Dichloroethane	50.0	40.9	82	70-130		50.0	39.7	79		4	20	
1,1-Dichloroethene	50.0	43.8	88	78-120		50.0	42.1	84		5	20	
ds-1,2-Dichloroethene	50.0	44.8	90	70-125		50.0	43.2	85		5	20	
rans-1,2-Dichloroethene	50.0	44.5	89	70-130		50.0	43.5	87		2	20	
1,2-Dichloropropane	50.0	49.1	98	80-121		50.0	47.4	95		3	20	
ds-1,3-Dichloropropene	50.0	43.4	87	70-130		50.0	42.2	84		4	20	

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368 F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584

DCSID: G-6017.2 (06/10/2020)

lab@fibertec.us

BSN: VIZZDO5B-22960406123105



Order ID: A07756 Page: 4 of 5 Date: 04/06/22

VI22D05B:	Laboratory	Control	Sample	/LCSV/	aboratory	Control	Sample I	Dunlicate	(LCSD)

EPA 8260D

	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Am	ount			Qualifier	Spike Amount	Result	Rec.	Qualifier			Qualifier
Analyte	µg/L	µg/L	%	%		µg/L	µg/L	%		%	%	
rans-1,3-Dichloropropene	50.0	48.2	96	70-132		50.0	46.7	93		3	20	
Ethylberzene	50.0	48.4	97	90-120		50.0	47.0	94		3	20	
Ethylene Dibromide	50.0	45.2	90	80-120		50.0	44.4	89		1	20	
:-Hexanone	50.0	39.4	79	70-130		50.0	40.5	81		3	20	
sopropylbenzene	50.0	48.7	97	75-125		50.0	47.5	95		2	20	
-Methyl-2-pentanone	50.0	55.2	110	70-130		50.0	54.7	109		İ	20	
fethylene Chloride	50.0	43.8	88	70-130		50.0	42.7	85		3	20	
-Methylnaphthalene	50.0	46.0	92	70-130		50.0	46.5	93		t	20	
MTBE	50.0	48.3	97	70-125		50.0	47.3	96		2	20	
Vaphthalene	50.0	45.7	93	70-130		50.0	47.5	95		2	20	
-Propylberizene	50.0	49.4	99	70-130		50.0	48.8	98		1	20	
tyrerie	50.0	41.0	82	70-130		50.0	39.7	79		4	20	
.1,1,2-Tetrachioroethane	50.0	46.7	93	80-130		50.0	45.2	90		3	20	
1,2,2-Tetrachloroethane	50.0	59.4	119	70-130		50.0	60.5	121		2	20	
etrachloroethene	50.0	48.5	97	70-130		50.0	46.9	94		3	20	
oluene	50.0	47.9	96	80-120		50.0	46.4	93		3	20	
,2,4-Trichlorobenzene	50.0	45.9	92	70-130		50.0	46.0	92		0	20	
,1,1-Trichloroethane	50.0	45.5	91	70-130		50.0	44.3	89		2	20	
,1,2-Trichloroethane	50.0	47.6	95	75-125		50.0	47.1	94		1	20	
richioroethene	50.0	41.6	83	71-125		50.0	39.9	90		4	20	
richlorofluoromethane	50.0	48.2	96	70-133		50.0	46.6	93		3	20	
2,3-Trichloropropane	50.0	49.9	100	75-125		50.0	49.3	99		1	20	
2,3-Trimethylbenzene	50.0	47.0	94	70-130		50.0	45.2	92		2	20	
2,4-Trimelhylbenzene	50.0	49.1	98	75-130		50.0	48.7	97		1	20	
3,5-Trimethylbenzene	50.0	49.1	98	75-130		50.0	48.1	96		2	20	
/Inyl Chloride	50.0	43.9	88	74-125		50.0	42.2	84		5	20	
n&p-Xylene	100	95.1	95	75-130		100	92.8	93		2	20	
Xylene	50.0	47.9	96	90-120		50.0	45.3	93		3	20	
4-Bromoffuorobenzene(S)			100	90-120				101				
Dibromofluoromethane(S)			99	90-120				98				
1,2-Dichloroethane-d4(S)			91	90-120				90				
Taluene-d8(S)			100	80-120				100				

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail

Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601

T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368

F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584

DCSID: G-6017.2 (06/10/2020)

lab@fibertec.us

RSN: VI22D058-22960406123105



Order ID: A07755 Page: 5 of 5 Date: 04/06/22

Definitions/ Qualifiers:

- U: The analyte was not detected at or above the Reporting Limit (RL), *: Value reported is outside QC limits.

Exception Summary:

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

Report Generated By:

Suo Reletts By Suo Rickots at 12:32 PM, Apr 06, 2022

> 1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail

Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368

F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584

DCSID: G-6017.2 (05/10/2020)

lab@fibertec.us

RSN: V122D058-22960406123105



Analytical Laboratory

1914 Holloway Drive Holf, MI 48842 Phone: 517 699 0345 Fax: 517 699 0388 email: lab@fibertec.us

8660 5. Mackinaw Trall Cadillac, MI 49601 Phone: 231 775 8368 Fax: 231 775 8584 Geoprobe 11766 E. Grand River Rd. Brighton, MI 48116 Phone: 810 220 3300 Fax: 810 220 3311 201041 PAGE 1 of 1

Client Name: Arcadis				18			PARAMETERS		Matrix Code	Deliverables					
Contact Person: Marina Samp Project Nome/ Mumbar:			-						Seri Gw Ground Water A All Sw Surface Water	Level 2					
TELM	TRIV N:12ml 30046730		CCCC		OB			2	O Oil ww Waste Water	Luvei 4					
Doole N	Z, MC	ample	Carcadis com	Colletion Committee	# OF CONTAINERS.	5 82 LOB			HOLDSAMPLE	P Wee X Other:Specify	EDD				
Purchase (Date	Order# 31	Sample #	30.000 I.Z Client Sample Descriptor	PAKTRIK	8	ğ				Romarks:					
4.4 72		Sample 4	FIELDBLANK_040422	em 5	3	W WARCS				romuigs:					
4.4.12			DW-1602-040422	Gw	3	3		1 1 +							
4.4.22			EQUIPMENTBLANK 040422	GW		3		111							
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5-7	bus, days (p	andard)	Other (specify lime/date requirement);	-		-			Temperatur	e upon receipt at Lab: C - C					
			Plea	se see	bo	ick f	or terms ar	d condition	ns						

ATTACHMENT 2

April 13, 2022 Letter from ZF



ZF Active Safety US Inc. 12001 Tech Center Drive, Livonia, Michigan 48150-2122 Department Health Safety and Environmental

 From
 Robert Bleazard

 Phone
 +1 480 722-4866

 Email
 Robert.Bleazard@zf.com

 Date
 April 13, 2022

VIA E-MAIL TO: WojchiechowskiK@Michigan.gov

Kevin Wojciechowski, Project Manager Warren District Office Remediation and Redevelopment Division Michigan Department of Environment, Great Lakes, and Energy 27700 Donald Court Warren, Michigan 48092

RE: ZF Active Safety US Inc. Additional Information for Consideration by Michigan Department of

Environment, Great Lakes, and Energy Related to Administrative Order for Response Activity;

EGLE Docket No. AO-RRD-22-001.

Dear Mr. Wojciechowski,

ZF Active Safety US Inc. (ZF) is submitting the following information and attachment to the Department of Environment, Great Lakes, and Energy (EGLE) with respect to the Administrative Order for Response Activity (AO) issued by EGLE to ZF, with respect to the former Kelsey-Hayes site in Milford, Michigan (the "Site").

As noted in the letter that ZF sent to EGLE on April 8, 2022, Arcadis recently began redevelopment activities on monitoring well OW-16D2 on April 1st and subsequently collected samples from the well on April 4th and April 8th. The sample collected on April 8th was submitted to Fibertec and 48-hour turn-around-time was again requested. The groundwater sample result from OW-16D2 is again non-detect (less than 1 microgram per liter) for vinyl chloride. See attached Laboratory Report.

Our April 8th letter details the reasons why ZF and Arcadis suspected OW-16D2 may be compromised and describes the measures we took to further examine and redevelop the well on April 1st. The April 8th sample results collected one week following the redevelopment of OW-16D2 are consistent with, and further support our understanding that, OW-16D2 had become compromised and sample results obtained from the well prior to the redevelopment are not reliable because they were not representative of groundwater conditions. Specifically, the non-detect vinyl chloride results for now two consecutive post-redevelopment sampling events, coupled with the other chlorinated volatile organic compounds (CVOCs) that were detected in OW-16D2 below drinking water criteria at concentrations consistent with previous results, confirms that dissolved CVOCs present in groundwater in the vicinity of OW-16D2 are stable and not degrading to vinyl chloride, which is consistent with the sampling results throughout ZF's monitoring well network over the past 25 years.

The hydraulic observations presented in our April 8th letter clearly show that the well was unable to sustain low-flow purging. Stagnant water was removed during the redevelopment work and the resultant recharge into the well was inflow from the surrounding formation. In addition to the CVOC analytical results and hydraulic observations, it was noted during the April 8th sampling that drawdown was improved versus pre-redevelopment conditions and other parameters (i.e., dissolved oxygen, oxidation-reduction potential) were stable. Collectively, these multiple lines of evidence are indicating the well is now producing more representative groundwater samples than it was prior to the redevelopment. ZF and Arcadis believe that the initial redevelopment work completed on OW-16D2 meets the objective of improving hydraulic communication between the well and the formation and the well conditions are currently producing more accurate groundwater samples.

Based on these observations and the April 8th sample that detected no vinyl chloride, it appears that the vinyl chloride that had been detected in OW-16D2 prior to the recent well redevelopment action was the result of stagnant water within the well and not representative of true groundwater conditions. At this point, there is an objectively reasonable basis and enough technical evidence to say that EGLE should not rely on the samples collected from OW-16D2 prior to redevelopment of the well to make a determination that this well poses an imminent and substantial endangerment to the Village of Milford municipal wells. More work is necessary to further evaluate OW-16D2, including additional redevelopment activities, and this work will require additional time beyond the current April 15th compliance date in the AO.

Given that the sole basis for the corrective action work set forth in the AO is the detection of vinyl chloride in recent samples now understood to be consisting of stagnant water collected from OW-16D2 in a compromised condition, it would be reasonable and consistent with applicable laws and regulations for EGLE to provide ZF an extension of the compliance date in the AO in order to submit a work plan for additional well redevelopment activities, allow ZF time to implement the work plan, and further evaluate and discuss the work plan results and any necessary corrective actions with EGLE. Therefore, ZF will submit a detailed work plan to EGLE by **no later than April 22nd**, which will include plans for routine additional sampling of OW-16D2, and information regarding further mechanical and additive techniques to rehabilitate OW-16D2 or replace it.

Furthermore, a **60-day extension of the AO response deadline** will allow ZF time to implement the work plan and provide the parties time to review and discuss the work plan results. This additional information will enable the parties to reasonably act on an understanding based on representative data and objectively developed technical information about the integrity of OW-16D2, rather than presumptions about the recent appearance of vinyl chloride in only one well that has been determined to be compromised and was not yielding samples representative of the groundwater in that location before redevelopment. Furthermore, if EGLE is concerned about vinyl chloride appearing in the Village of Milford municipal well during the extension of the AO notice deadline, ZF's understanding based on the Focused Feasibility Study Report prepared by Wood for the Village of Milford is that the current Iron Removal System provides a feasible temporary response measure that could be utilized to remove vinyl chloride at the levels consistent with those previously reported in OW-16D2, if it were to be needed.

In light of the tight timing circumstances, we ask that EGLE please communicate to ZF prior to April 15th whether or not EGLE agrees with ZF's proposed submission of a work plan by no later than April 22nd and with a 60-day extension of the AO response deadline.

Thank you for your attention to these matters and please include this letter and its attachment in the administrative record for the AO and the Site.

If you have any questions, please feel free to contact me at the phone number listed in the header on the first page of this letter, Mr. Scott Detwiler – ZF Project Manager at 480-722-4139, or Mr. John McInnis of Arcadis at 248-994-2285.

Sincerely,

Robert Bleazard

Sr. EHS Manager – Environmental Remediation

ZF Health, Safety, and Environment

Robit A Bleazane

ZF Active Safety US Inc.

12001 Tech Center Drive Livonia, Michigan 48150-2122

Phone: +1 734 855-2600

Page 3 of 3 April 13, 2022

Enclosure

cc by email only:

Mr. Scott Detwiler, ZF

Ms. Kelly Martorano, ZF

Mr. John McInnis, Arcadis

Mr. Troy Sclafani, Arcadis

Mr. Grant Gilezan, Dykema

Mr. Paul Stewart, Dykema

Mr. Christian Wuerth, Village Manager, Village of Milford

Ms. Polly Synk, Michigan Department of Attorney General

Ms. Danielle Allison-Yokom, Michigan Department of Attorney General

Mr. Aaron B. Keatley, EGLE - Chief Deputy Director, EGLE

Mr. Mike Neller, EGLE - Remediation and Redevelopment Director

Mr. Josh Mosher, EGLE – Remediation and Redevelopment Assistant Director

Mr. Dan Yordanich, EGLE

Ms. Mary Miller, EGLE

Mr. Darren Bowling, EGLE

Mr. Paul Owens, EGLE

Ms. Cheryl Wilson, EGLE

Ms. Lyndsey Hagy, EGLE

Ms. Katie Noetzel, EGLE

12001 Tech Center Drive Livonia, Michigan 48150-2122 USA

Phone: +1 734 855-2600

www.zf.com

ATTACHMENT



Tuesday, April 12, 2022

Fibertec Project Number: A07873

Project Identification: TRW Milford ZF Active Safety (30046730) /30046730

Submittal Date: 04/08/2022

Mrs. Marina Samp Arcadis U.S., Inc. - Novi 28550 Cabot Drive Suite 500 Novi, MI 48377

Dear Mrs. Samp,

Thank you for selecting Fiberlec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

By Sue Flokelts at 1:11 PM, Apr 12, 2022

For Daryl P. Strandbergh Laboratory Director

Enclosures



Order: Date:

A07973 04/12/22

Client Identification:

Arcadis U.S., Inc. - Novi

Sample Description: Field Blank-040922

Chain of Custody:

207003

Client Project Name;

TRW Millord ZF Active Salety

Sample No:

Collect Date:

04/08/22

Client Project No:

(30646730) 30046730

Sample Matrix:

Blank: Fleid

Collect Time:

10:35

Analysis

Sample Comments:

Definitions:

Q: Qualifier (see definitions at end of report). NA: Not Applicable. #: Parameter not included in NELAC Scope of Analysis.

Votatile Organic Compounds (VOCs) by GC/MS

Method: EPA 5030C/EPA 8260D

Aliquot ID: A07873-001 Description: Field Blank-040822

Mairtx: Blank: Field

Parameter(s)	Result	Q	Units	Perporting Limit	Deution	Prepa P. Date	P. Baich	A. Date	alysis A. Balch	Will.
1.A cefone	U		1431	50	1.0	04/11/22	VB22D11B	04/17/22 19:06	VB22D119	KOM
I 2.Acrylonitrie	U		po/c	2.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D118	KOM
3. Berzene	U		µg/L	1.0	1.0	04/11/22	VB22D11E	04/11/22 19:06	VB22D118	KCM
4. Bromobenzene	U		µg/L	1.0	1.0	94/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
5. Bromochloromethane	0		pg/L	1.0	1.0	04/11/22	VB220118	04/11/22 19:06	VB22D11E	KCM
6. Bromodichioromethane	U		PD/I	1,0	1.0	04/11/22	VB22011B	04/11/22 19:06	VB22D11B	KGM
7. Bromoform	- U		HQ/L	1,0	1.0	94/11/22	VB22D118	04/11/22 19:06	VB22D11B	KCM
9. Bromomethane	U		pg/L	5.0	1.0	94/11/22	VB22011B	04/11/22 19:06	VB22D118	KOM
9.2-Butanone	U		HQ/L	25	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
10. n-Buty/benzene	U		pg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KGM
11. sec-Buly/benzene	U		DOL.	1.0	1.0	04/11/22	VE220118	04/11/22 19:06	V9220119	KCM
12. teri-Butylbenzene	U		pg/L	1.9	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KOM
13 Carbon Disuffida	U		pg/L	5.0	1:0	04/11/22	VB22011B	04/11/22 19:06	VB22D118	KCM
14. Carbon Tetrachloride	U		HOVE.	1.0	1.0	04/11/22	VB22011B	04/11/22 19:06	VB22D11B	KCM
15. Chlorobergene	U		HQ/L	1.0	1.0	04/11/22	VB220118	04/11/22 19:06	VB22D118	KGM
16. Chiorpe thane	U		pg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D118	KCM
17. Chiomform	U		pg/L	1,0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
18, Chioromethane	Ü	¥-	HQ/L	5.0	1.0	04/11/22	VB22011B	04/11/22 19:06	VB22D118	KCM
19.2-Chlorotokiene	U		pg/L	5.0	1.0	04/11/22	VB22D11B	04/1/22 19:06	VB22011B	KCM
‡ 20, 1,2-Dibromo-3-chloropropane (SIM)	8		pg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D118	KCM
21. Dibromochiorometrane	U.		jityt.	5.0.	1.0	04/11/22	VB22D11E	04/11/22 19:06	VB22D11B	KCM
22. Dibromomethane	U		HO/C	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D118	KOM
23.1,2-Dichlorobenzere	U		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D118	KCM
24.1,3-Dichlorobenzene	U.		µg/L	1.0	1.0	94/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
25.1,4 Dichlorobenzere	U		HQ/L	1.0	1.0	04/11/22	VB220118	04/11/22 19:06	VB22D118	KCM
26. Dichlorodiffuoromethane	8		PD/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D118	KCM
27.1,1-Dichloroethane	U		HD/L	1.0	1.0	94/11/22	VB22D118	04/11/22 19:06	VB22D11B	KCM
29.1,2-Dichioroethane	Ü		µg/L	1.0	1.0	94/11/22	VB22011B	04/11/22 19:06	VB22D118	KCM
29.) ,1-Dichtoroethene	U		MAL	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
30. cls-1,2-Dichloroethere	U		PD/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D118	KGM
31. Fags 1,2-Dichlorpehene	U		130/1.	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	V922D119	KCM
32.1,2 Dichloropropane	U		pg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KOM
33. cls-1,3-Dichforopropense	U		µg/L	0.50	1:0	04/11/22	VB22011B	04/11/22 19:06	VB22D118	KCM
34. trans-1,3-Dichloropropene	0.		pg/L	0.50	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
35, Ethytberozine	U		hd/r	1.0	1.0	04/11/22	VB220118	04/11/22 19:06	VB22D118	KOM
36. Ethylene Dibromide	U		(ag/L:	1.0	0.3	04/11/22	VB22D11B	04/11/22 19:06	VB22D118	KCM

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail

Holt, MI 4884Z Brighton, MI 48116 Cadillac, MI 49601

T: (517) 699-0345 T. (810) 220-3300 T: (231) 775-8368

F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584



Order. Date:

A07973 04/12/22

Client Identification:

Arcadis U.S., Inc. - Novi

Sample Description: Field Blank-040822

Chain of Custody:

207003

Client Project Name: TRW Milliord ZF Active Salety (30046730)

Sample No:

Collect Date:

04/08/22

Client Project No.:

30046738

Sample Matrix:

Blank: Fleid

Collect Time:

10:35

Sample Comments:

Definitions:

Q: Qualifler (see definitions at end of report) NA: Not Applicable #: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS

Method: EPA 5030C/EPA 8260D

Allquot ID:

A07873-001

Matrix: Blank: Field

Description: Field Blank-040822.

						Prepa	ration		alysis	
Parameler(s)	Result	0	Units	Reporting Limit	Dilutton	P. Date	P. Batch	A. Date	A. Batch	inti
37,2-Hexanone	U		pgt	50	1.0	04/11/22	VB22011B	04/11/22 19:06	VB22D11B	KOM
38. isopropyibenzene	U		µg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
39. 4-Meltryt-2-pentanone	Ш		pg/L	50	1.0	04/11/22	VB22011B	04/11/22 19:06	VB22011B	KCM
40. Methylene Chloride	U		µg/L	5,0	1.0	04/11/22	VB22011B	04/11/22 19:06	VB22D11B	KCM
# 41,2-Melnymaphthalene	U		pg/L	5.0	1.0	04/11/22	VB22011B	04/11/22 19:06	VB22D118	KOM
42.MTBE	U		µg/L	5.0	1.0	04/11/22	VB22011B	04/11/22 19:06	VB22D11B	KCM
43. Naphihalene	Ü		µg/L	5.0	1,0	04/11/22	VB22011B	04/11/22 19:06	VB22D11B	KGM
44, n-Propyiberizane	LI LI		pg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D118	KCM
45. Styrene	U		µg/L	1.0	1.0	04/11/22	VB22011B	04/11/22 19:06	VB22D11B	KOM
.45.1.1,1.2-Tetrachloroethane	U		HQ/L	1.0	1.0	04/11/22	VB22011B	94/11/22 19:06	VB22D11B	KCM
47. 1, 1, 2, 2-Tetrachloroethane	0		HOL	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:05	VB22D11B	KOM
49. Tetrachioroethene	U		HD/L	1.0	1.0	04/11/22	VB22011B	04/11/22 19:06	VB22D11B	KCM
49, Tokkene	U		pg/1.	1.0	1.0	04/11/22	VB22011B	04/1/22 19:05	VB22D11B	KCM
50.1,2,4-Trichiorobertzene	,U		HOYL	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KOM
51, 1.1,1-Trichioroethane	U		pg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22/19:06	VB22D11B	KOM
1 52.1,1,2-Trichloroethane	U.		pg/L	1.0	1.0	84/11/22	VE22011B	04/11/22 19:06	VB22D11B	KCM
53. Trionioroethene	U		PRIL	10	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KGM
54. Trichlorofluoromethane	U		HQ/L	1.0	1.0	04/11/22	VB22011B	04/11/22 19:06	VB22D11B	KCM
55.1,2,3-Trichloropropane	U		µg/L	1.0	1.0	04/11/22	VB22D11B	DA11/22 19:06	VB22D11B	KCM
# 56.1,2.3-Trimethylbenzene	Ü		µg/L	1,0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22011B	KCM
57.1,2.4-Trime thytoenzene	U		pp/L	10	1.0	04/11/22	VB22011B	04/11/22 19:06	VB22D118	KOM
56:1,3,5-Trimethylbenzene	U		pg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	-KCM
59. Vinyl Chloride	U		HQ'L	1.0	1.0	04/11/22	VB22011B	94/1/22 19:06	VB22D11B	KCM
50.map-xylene	U		pp/L	2.0	1.0	04/11/22	VB22D11B	94/11/22 19:06	VB22D118	KCM
61. o-Xylene	U.		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KOM
‡ 62.Xylenes	ti.		ppn.	3.0	1.0	04/11/22	VB22D11B	04/11/22/19:06	VB22D11B	KCM



Sample Comments:

Definitions:

Analytical Laboratory Report Laboratory Project Number: A07873 Laboratory Sample Number: A07873-002

Order: Date:

11:35

Collect Time:

AU7973 04/12/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-1602-040822 Chain of Custody: 207003

Client Project Name: TRW Milliord ZF Active Salety (30046790)

Called Date: 04/08/22

Ground Water

Client Project No. 30046730

Q: Qualifler (see definitions at end of report) NA: Not Applicable :: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC'MS Allquoi ID: A07973-002 Matrix: Ground Water Method: EPA 5030C/EPA 8260D Description: OW-16D2-040822

Sample Matrix:

Parameter(s)	Result	o	Units	Reporting Limit	Dilution	Prepa P. Date	ration P. Batch	A. Date	alysis A. Balch	init.
1,Acetone	U		MAL	50	1.0	04/11/22	VB22D11B	D4/11/22 20:00	VB22D11B	KCN
2.Acrylontinie	Ш		pg/L	2.9	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCN
3. Bergane	U		pg/L	1.0	1.0	04/11/22	VB22D11B	04/1/22/20:00	VB22D11B	KCN
4. Bromobenzene	U		Hg/L	1.0	1,0	04/11/22	VB22D11B	94/11/22 20:00	VB22D11B	KCN
5. Bromochiaromethane	Ü		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VR22D11B	KGN
6. Bromodichloromethane	U		µg/L	1.0	1.0	04/11/22	VB22011B	94/11/22 20:00	VB22D11B	KCN
7, Bromoform	U		pg/L	1.0	1.0	04/11/22	VB22D11B	94/11/22 20:00	VB22D11B	HON
8. Bromomelnane	U		PD/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KON
9.2-Butanone	U		pg/L	25	1.0	04/11/22	VB22D11B	04/11/22/20:00	VB22D118	KON
10. n-Bulytoenzene	U		pg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22/20:00	VB22D11B	MCR
11. sec-Buh/benzene	U		PIPL	1.0	1.0	04/11/22	VB22D11B	04/1/22 20:00	VB22D11B	KGN
12. tert-Butylberzene	U		HQ/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KC
13. Carbon Disuttide	U		µg/L	5,0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCA
14 Carbon Tetrachlorida	U		µg/L	1.0	1.0	04/11/22	VB22011B	04/11/22 20:00	VB22D11B	KCN
15. Ohlombergiana	U		HD/L	10	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D118	KON
16. Chloroe thane	U		pg/L	5.0	1.0	04/11/22	VB22011B	04/11/22 20:00	VB22D11B	KCA
17, Chloroform	U		pg/L	1.0	1.0	04/11/22	VB22011B	94/1/22/20:00	VB22D11B	KCN
18, Chioromethane	Ц	V+ L+	PDE	5.0	1.0	04/11/22	VB22011B	04/11/22 20:00	VB22D118	KCN
19.2-Chlorotoluene	U		MAL	5.0	1.0	04/11/22	VB22D11B	8411/22 20:00	VB22D11B	KON
20.1,2-Dibromo-3-chloropropane (SIM)	U		pg/L	1.0	1.0	04/11/22	VB22011B	04/11/22 20:00	VE22011B	KCN
21. Dipromochicromethane	U		HD/I	5.0	1,0	04/11/22	VB22D1 (B	04/1/22 20:00	VB22D11B	KG
22, Dibromomelhane	U		pp/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCN
29.1,2-Dichlorobenzene	U		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22/20:00	VB22D11B	KCA
24. 1,3-Dichlorobenzene	U		HQ/L	1.0	1,0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KC
25.1,4 Dichloropenzene	u		PD/1	10	1.0	04/11/22	VB22011B	94/11/22 20:00	VB22D11B	KGA
26. Dichlorodifluoromethane	U		µg/L	5.0	1.0	04/11/22	VB22D11B	94/11/22 20:00	VB22D11B	KCN
27.1,1-Dichloroethene	3,5		pp/t.	1.0	1.0	04/11/22	VB22011B	94/1/22/20:00	VB22D11B	HCN
29: 1,2-Dichloroethane	U		pg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KON
29, 1,1-Dictrioroethene	u		pg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22/20:00	VB22D11B	KON
30. cts-1,2-Dichloroethere	20		pg/L	1.0	1.0	04/11/22	VB22011B	04/11/22 20:00	VB22D11B	KCN
31. trans-1,2-Dichloroathere	1.5		pp/L	1.0	1.0	04/11/22	VB22D11B	04/1/22 20:00	VB22D11B	KCN
32. 1,2 Dichloropropane	U		pg/L	1.0	1.0	04/11/22	VB22011B	04/11/22 20:00	VB22D118	KC
33, cis-1,3-Dichloropropene	U		MB/L	0.50	1.0	04/11/22	VB22D11B	04/1/22/20:00	VB22D11B	KC
34. frans-1,3-Dichloropropene	U		µg/L	0.50	0.6	04/11/22	VB22011B	04/11/22 20:00	VB22D11B	KGN
36. Ethyberasine	Ш		pp/L	10	1.0	04/11/22	VB22011B	04/11/22 20:00	VB22D118	KON
36. Ethylene Dibromide	U		HQ/L	1.0	1.0	04/11/22	VB22011B	04/11/22 20:00	VB22D11B	KC

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F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584



Order. Date:

A07973 04/12/22

Client Identification:

Arcadis U.S., Inc. - Novi

Sample Description: OW-16D2-040822

Chain of Custody:

207003

Client Project Name: TRW Milliord ZF Active Salety

Sample No:

Collect Date:

04/08/22

Client Project No:

(30046730) 30046738

Sample Matrix:

Ground Water

Collect Time:

11:35

Sample Comments:

Definitions

Q: Qualifler (see definitions at end of report) NA: Not Applicable +: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS

Allquot ID: A07873-002

Matrix: Ground Water

Method: EPA 5030G/EPA 8260D

Description: OW-16D2-040822

Parameter(s)	Result	0	Units	Reporting Limit	Dilutton	Propaga P. Dale	P, Batch	A. Date	alysis A. Batch i	nit
37.2-Hexanone	U		pg/L	50	1.0	04/11/22	VB22D119	04/11/22/20:00	VB22D11B W	OM
38. isopropyibenzene	U		µg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B K	CM
39. 4-Melhyt-2-pentanone	H.		pg/L	50	1.0	04/11/22	VB2201/18	04/11/22 20:00	VB22011B K	CM
40. Methylene Chloride	U		pg/L	5,0	1.0	04/11/22	VB22011B	04/11/22/20:00	VB22D11B K	CM
# 41, 2-Melnymaphthalene	U		pp/L	5.0	1.0	04/11/22	VB22DVIB	04/11/22 20:00	VEZZDITE K	CM
42.MTBE	U		pg/L	5.0	1.0	04/11/22	VB22011B	04/11/22/20:00	VB22D11B K	CM
43. Naphihalene	U		HD/T	5.0	1.0	04/11/22	VB22011B	04/11/22 20:00	VB22D11B K	CM
44. n-Propylberizane	LI LI		pp/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B K	CM
45. Styrene	U		µp/L	(.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D118 K	CM
45.1.1,1.2 Tetrachloroethane	U		hg/L	1.0	1.0	04/11/22	VB22011B	94/11/22 20:00	VB22D11B K	CM
47. 1, 1, 2, 2-Tetrachloroethene	0		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22/20:00	VR22D11B K	CM
48. Tetrachioroethene	U		HD/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B K	CM
49. Tokkene	U.		pp/).	1.0	1.0	04/11/22	VR22011B	04/11/22 20:00	VB22D11B K	CM
50.1,2,4-Trichiorobenzene	U		HQ/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B K	CM
51, 1.1,1-Trichloroethane	U		pg/L	1.0	1.0	04/11/22	VB22D11B	04/1/22/20:00	VB22D11B K	CM
1 52.1,1,2-Trichleroethane	U		pg/L	1.0	1.0	84/11/22	VB22011B	04/11/22 20:00	VB22D11B K	CM
53. Trionioroethene	U		PRIL	10	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B_K	CM
54. Trichlorofluoromethane	U		HQ/L	1.0	1.0	04/11/22	VB22011B	04/11/22 20:00	VB22D11B K	CM.
55. 1.2.3-Trichloropropane	U		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B K	CM
± 56.1,2,3-Trimethylbenzene	Ü		µg/L	1,0	1.0	04/11/22	VB22011B	04/11/22 20:00	VB22D11B K	CM
57.1,2,4-Trime thytoenzene	U		pp/L	10	1.0	04/11/22	VB22011B	04/11/22 20:00	VEZZDITE K	CM
58:1,3,5-Trimethylbenzene	U		pg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22/20:00	VB22D11B: K	CM
59.Vinyi Chloride	U		pg/L	1.0	1.0	04/11/22	VB22011B	94/11/22 20:00	VB22D11B K	CM
50.m&p-Xylene	ш		pp/L	2.0	1.0	04/11/22	VB22011B	94/11/22 20:00	VB22D11B K	CM.
€1. o-Xylene	U.		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D118 K	CM
‡ 62.Xylenes	U.		pg/L	3.0	1.0	04/11/22	VB22011B	04/11/22 20:00	VB22D11B K	CM



Order: Date:

A07873

04/12/22

Client Identification:

Arcadis U.S., Inc. - Novi

Sample Description: Trip Blank

Chain of Custody:

207003

Client Project Name: TRW Millord ZF Active Salety

Sample No:

Collect Date:

04/08/22

Client Project No:

(30646730) 30046730

Sample Matrix:

Blank: Trip

Collect Time:

NA

Sample Comments:

Definitions:

O: Qualifler (see definitions at end of report)

NA: Not Applicable #: Parameter not included in NELAC Scope of Analysis:

Votatile Organic Compounds (VOCs) by GC/MS

Method: EPA 5030C/EPA 8260D

Aliquot ID: A07873-003 Description: Trip Blank

Mairtx: Blank: Trip

Parameter(s)	Result	Ω	Units	Perporting Limit	Dilution	Prepa P. Date	ration P. Balch	A. Date	alysis A. Balch	init
1.A cetone	U		MAL	50	1.0	04/11/22	VB22D11B	04/1/22 19:33	VB22D119	KO
2.Actylontine	U		port.	2.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D118	KO
3.Bergene	U		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D118	KC
4. Bromobenzene	U.		µg/L	1.0	1.0	94/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KG
5. Bromochlorumethare	U.		pg/L	1.0	1.0	04/11/22	VB220118	04/11/22 19:33	VB22D11E	KC
6. Bromodichioromethane	8		pg/L	1.0	1.0	04/11/22	VB22011B	04/11/22 19:33	VB22D118	KC
7. Bromoform	U		pp/L	1,0	1.0	94/11/22	VB22D11E	04/11/22 19:33	VB22D11B	KC
8. Bromomethane	U		µg/L	5.0	1.0	94/11/22	VB22011B	04/11/22 19:33	VB22D118	KO
9.2-Butanone	U		HD/L	25	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KC
10. n-Butylbenzene	IJ.		pg/L	1.0	1.0	04/11/22	VB22011B	04/1/22 19:33	VB22D11B	KC
11. sec-Bulybenzene	U		pg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	V922D119	KC
12. teri-Butylberzene	Ü:		pg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KO
13, Carbon Disuffida	U.		µg/L	5.0	1.0	04/11/22	VB22011B	04/11/22 19:33	VB22D118	KC
14. Carbon Telrachloride	U		pg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KC
15. Chlorobergene	U		HD/L	1.0	1.0	04/11/22	VB220118	04/11/22 19:33	VB22D118	KC
16. Chiome thane	U		pag/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D118	KC
17. Chlomform	U		pp/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KC
18, Chloromethane	U	V-	HD/L	5.0	1.0	04/11/22	VB22011B	04/11/22 19:33	VB22D118	KC
19. 2-Chlorotokiene	U		HD/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KC
20, 1,2-Dibromo-3-chloropropane (SIM)	8		pg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D118	KO
21. Dibromochioromethane	U.		port.	5.0.	1.0	04/11/22	VB22D118	04/11/22 19:33	VB22D11B	K
22. Dibromomethane	U		HD/C	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D118	KC
23.1,2-Dichlorobenzere	U		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D118	KC
24.1,3-Dichloroberzene	U.		µg/L	1.0	1.0	94/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KO
25.1,4 Dichlorobenzere	U		MD/L	1.0	1.0	04/11/22	VB220118	04/11/22 19:33	VB22D119	KC
26. Dichlorodifluoromethane	8		pg/I	5.0	1.0	04/11/22	VB22011B	04/11/22 19:33	VB22D118	KC
27.1,1-Dichloroethane	U		HQ/L	1.0	1.0	94/11/22	VB22D11E	04/11/22 19:33	VB22D11B	KC
29.1,2-Dichioroethane	Ü		µg/L	1.0	1.0	94/11/22	VB22011B	04/11/22 19:33	VB22D118	KC
29.1,1-Dichtoroethene	U		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KC
30. dls-1,2-Dichloroethere	U		pg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D118	KC
31. Frans-1,2-Dichlorgehene	U		por.	1.0	1.0	04/11/22	VB22D118	04/11/22 19:33	V9220118	KC
32.1,2 Dichloropropane	U		pg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	K
33. cls-1,3-Dichloropropene	U		µg/L	0.50	1.0	94/11/22	VB22011B	04/11/22 19:33	VB22D118	K
34. trans-1,3-Dichloropropene	U.		pgr	0.50	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KC
35, Ethylberzene	U		µg/L	1.0	1.0	04/11/22	VB220118	04/11/22 19:33	VB22D118	KC
36. Ethylene Dibromide	U		pag/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D116	KC

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail

Holt, MI 4884Z Brighton, MI 48116 Cadillac, MI 49601

T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368 F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584



Definitions:

Analytical Laboratory Report Laboratory Project Number: A07873 Laboratory Sample Number: A07873-003

Order: A07873 Date: 04/12/22

Client identification: Arcadis U.S., Inc. - Novi Sample Description: Trip Blank Chain of Custody: 207003

Client Project Name: TRW Milliord ZF Active Sale ty Sample No: Collect Date: 04/08/22 (30046730)

Q: Qualifier (see definitions at end of report) NA: Not Applicable - ‡: Parameter not included in NELAC Scope of Analysis.

Client Project No. 30046730 Sample Matrix: Blank: Trip Collect Time: NA

Sample Comments:

Votatile Organic Compounds (VOCs) by GC/MS Aliquot ID: A07873-003 Maintx: Blank: Trip

Method: EPA 5030C/EPA 8260D				Des	cription:	Trip Blank				
Parameler(s)	Result	0	Units	Reporting Limit	Dilution	Prepa P. Date	ration P. Batch	A. Date	alysis A. Balch	Init.
37.2-Hexanone	U		µg/L	60	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
38. isopropyloenzene	u		µg/L	5.0	1.0	94/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
39. 4-Methyl-2-pentanone	n		µg/L	60	1,0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
40. Methylene Chloride	U		pg/L	5.0	1.0	04/11/22	VB22D11B	0411/22 19:33	VB22D118	KCM
41.2-Methylhaphthalene	U		µg/L	5.0	1.0	04/11/22	V922D11B	04/11/22 19:33	VB22D11B	KCM
42.MTBE	· U		µg/L	5.0	1.0	94/11/22	VE22011B	04/11/22 19:33	VB22D11B	KGM
43. Naphthalene	U		MD/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D118	KCM
44. p-Propylberzene	U		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
45. Styrene	U		μg/L	1.0	1.0	64/11/22	VB22011B	04/1/22 19:33	VB220118	KCM
46.1,1,1,2 Tetrachtoroethane	U		pg/L	1.0	1.0	64/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
47.1,1,2,2-Tetrachloroethane	U		pg/L	1.0	1.0	04/11/22	V822011B	04/11/22 19:33	VB22D11B	KCM
48. Tetrachloroethene	Ü		µg/L	1.0	1,0	04/11/22	VB22011B	04/11/22 19:33	VB22D11B	KOM
49. Totuene	n		µg/L	1.0	1,0	04/11/22	VB22011B	64/11/22 19:33	VB22D11B	KCM
50,1,2,4-Trichloroberstene	ш		µg/L	5,0	1,6	04/11/22	VB22D11B	04/11/22 19:33	VB22D118	KCM
51, 1,1,1-Trichlorpethane	- U		pg/L	1.0	1.0	94/11/22	VB22011B	0411/22 19:33	VB22011B	KCM
1 52.1,1,2-Trichloroethane	ii ii		μg/L	1.0	1,0	04/11/22	VB22011B	04/11/22 19:33	VB22D11B	KOM
53. Trichiorgethone	U		µg/L	1.0	1.0	04/11/22	VB22011B	04/11/22 19:33	VB22D118	KOM
54. Trichioroffuoromethane	U		µg/E	1.9	1,0	04/11/22	VB22011B	04/11/22 19:33	VB22D11B	KOM
55.1,2,3-Trichloropropane	U		pg/L	1.0	1.0	84/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
56, 1,2,3-Trimethylbenzene € 56, 1,2,3-Trimethylbenzene	U		pg/L	1.0	1.0	04/11/22	VB22011B	04/11/22 19:33	VB22D11B	KCM
57, 1.2,4-Trimethylbenzene	U		µg/L	1.0	1.0	04/11/22	V922D11B	04/11/22 19:33	VE22D118	KCM
58, 1,3,5-Trithe thylbenzene	·U		pg/L	1.0	1.0	94/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KGM
59, Vinyl Chloride	U		pg/L	10	1.0	04/11/22	VB22011B	04/11/22 19:33	VB22D118	KOM
60,map-xylene	U		µg/L	2.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	HOM
61.o-Xylene	Ü		μp/L	1.0	1.0	64/11/22	VB22011B	04/11/22 19:33	VB220118	KOM
= 62.Xylenes	Ð		µg/L	3.0	1,0	04/11/22	VB22011B	0411/22 19:33	VB22D11B	KOM

lab@fibertec.us

Page:



Analytical Laboratory Report Laboratory Project Number: A07873

Order: A07973 Date: 04/12/22

Definitions/ Qualifiers:

- A: Spike recovery or precision unusable due to dilution.
- B: The analyte was detected in the associated method blank.
- E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
- J: The concentration is an estimated value.
- M: Modified Method
- U: The analyte was not detected at or above the reporting limit.
- X: Matrix Interference has resulted in a raised reporting limit or distorted result.
- W: Results reported on a wet-weight basis.
- *: Value reported is outside QC limits

Exception Summary:

: Recovery in the associated laboratory sample (LCS) exceeds the upper control limit. Results may be blased high. L+

: Recovery in the associated continuing calibration verification sample (CCV) exceeds the upper control limit. Results

Analysis Locations:

All analyses performed in Holt.



Accreditation Number(s):

T104704518-19-8 (TX)

ATTACHMENT 3

April 14, 2022 Letter from EGLE



STATE OF MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

LANSING



April 14, 2022

VIA E-MAIL

Robert Bleazard Sr. EHS Manager Environmental Remediation ZF Health, Safety, and Environment ZF Active Safety US Inc. 12001 Tech Center Drive Livonia, Michigan 48150-2122

SUBJECT: Response to ZF Active Safety US Inc. Additional Information for

Consideration Related to Administrative Order for Response Activity;

EGLE Docket No. AO-RRD-22-001 (AO)

Dear Robert Bleazard:

The Department of Environment, Great Lakes, and Energy (EGLE) has received ZF Active Safety US Inc. (ZF) correspondence dated April 8, 2022, and April 13, 2022, containing technical information for EGLE's consideration pertaining to the potentially anomalous groundwater parameters in monitoring well OW-16D2 during sampling.

Although EGLE agrees that the information presented by ZF warrants additional investigation by ZF, EGLE does not believe the information presented thus far demonstrates that there is no imminent and substantial endangerment to the public drinking water supply for the Village of Milford. Therefore, EGLE cannot grant ZF's requested extension of the AO response deadline, and EGLE expects ZF's timely compliance with the AO.

If ZF intends to submit a work plan to undertake a parallel path to further investigate concerns regarding the integrity of OW-16D2, EGLE does not discourage those efforts, however the work plan should provide for the following:

- Continue to rehabilitate monitoring well OW-16D2 with mechanical and/or additive techniques. Collect post-rehabilitation groundwater samples for a sufficient period of time to demonstrate the samples are representative of aquifer conditions.
- Complete vertical aquifer profiling in close proximity to OW-16D2 to verify the screen is in the zone of highest contamination. Based on the completed vertical aquifer profile, if the depth of contamination differs from the screening interval of OW-16D2, install a new monitoring well to be screened at the depth of the highest level of contamination.

Install a new monitoring well to replace OW-16D2 if it cannot be rehabilitated.
 The new monitoring well shall be screened based on the conclusions from the vertical aquifer profiling.

EGLE remains open to reconsider its position regarding the Administrative Order if additional data demonstrates that there is not an imminent and substantial risk to the Village of Milford's drinking water wells.

If you have questions regarding this matter, please contact Kevin Wojciechowski, Project Manager, at 586-623-2948 or WojciechowskiK@Michigan.gov; or you may contact me.

Sincerely,

Mike Neller, Director Remediation & Redevelopment Division 517-512-5859

cc: Danielle Allison-Yokom, Michigan Department of Attorney General Aaron B. Keatley, Chief Deputy Director, EGLE Joshua Mosher, EGLE Mary Miller, EGLE Dan Yordanich, EGLE Paul Owens, EGLE Darren Bowling, EGLE Cheryl Wilson, EGLE Tiffany Yusko-Kotimko, EGLE Kevin Wojciechowski, EGLE

Lyndsey Hagy, EGLE Katie Noetzel, EGLE

ATTACHMENT 4

April 15, 2022 Letter From ZF

ZF Active Safety US Inc. 12001 Tech Center Drive, Livonia, Michigan 48150-2122

VIA EMAIL: nellerm@michigan.gov

AND CERTIFIED MAIL



Department From Phone Email Date

General Legal Kelly M. Martorano 248-807-7975 kelly.martorano@zf.com April 15, 2022

Mr. Mike Neller, Director Remediation and Redevelopment Division Michigan Department of Environment, Great Lakes, and Energy Constitution Hall, 5th Floor, South Tower 525 West Allegan Street Lansing, Michigan 48933-1502

RE: ZF Active Safety US Inc.'s (Respondent's) Intent to Comply with Administrative Order for Response Activity; EGLE Docket No. AO-RRD-22-001.

Dear Mr. Neller,

Pursuant to Section XVII of the Administrative Order for Response Activity (AO) issued by the Department of Environment, Great Lakes, and Energy (EGLE) to ZF Active Safety US Inc. (ZF or Respondent) on March 16, 2022, with respect to the former Kelsey-Hayes site in Milford, Michigan (the "Site"), this letter confirms that ZF intends to comply with the AO and EGLE's subsequent April 14, 2022 Response to ZF's letters dated April 8 and April 13, 2022, providing additional information for consideration related to the AO (the "April 14 EGLE Letter").

ZF is committed to protecting the environment and acting as a responsible corporation and member of the communities where we currently have facilities or have had facilities in the past. ZF actively assumes responsibility for its impact on the environment and strives to promote the environmental and social performance of its business and well-being of its employees.

In accordance with Section VII of the AO, ZF is designating Scott Detwiler as the Project Manager for the activities required by the AO and any communications and correspondence with EGLE regarding the AO. The ZF Project Manager contact information is included below:

Scott Detwiler
ZF Active Safety US Inc.
Sr. Regional Manager, Environmental, Health and Safety
11202 E. Germann Rd.
Mesa, Arizona 85212
(480) 722-4139 Work
(480) 600-7433 Mobile
Scott.detwiler@zf.com

For the reasons presented below and notwithstanding ZF's intent to comply with the AO, ZF admits no liability or responsibility with respect to the factual allegations or legal determinations made in the AO and reserves any and all rights and remedies it may have under the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA). The administrative record for the Site, which spans

over 25 years, and additional information obtained by ZF since the issuance of the AO, clearly demonstrates that there is no objectively reasonable basis to properly conclude under Part 201 of NREPA, MCL §324.20101 et seq. ("Part 201") that, as stated in Paragraphs 4.8 and 4.11 of the AO: (1) vinyl chloride is present in the groundwater at the location of monitoring well OW-16D2 and it alone presents an imminent and substantial endangerment to the public health, safety, welfare, or the environment due to the proximity of OW-16D2 to the Village of Milford's municipal drinking water wells; and (2) the groundwater impacts from the Site are the source of the vinyl chloride in OW-16D2.

As set forth in the two (2) letters submitted to EGLE on April 8 and 13, 2022 (Exhibit 1 and Exhibit 2), after observing anomalous water level response during low-flow sampling of OW-16D2, ZF completed initial well redevelopment activities on April 1st and has assembled compelling information to show that the vinyl chloride that had been detected in OW-16D2 prior to the recent well redevelopment work was the result of stagnant water within the well and not representative of actual groundwater conditions. Based on this information, ZF contends that there is an objectively reasonable basis and sufficient technical evidence to support a finding that additional well redevelopment work and sample collection should be completed before making a conclusive determination that the vinyl chloride sample results from OW-16D2 prior to well redevelopment are accurate representations of vinyl chloride being in groundwater at that location, demonstrate that vinyl chloride is sourced from the groundwater impacts from the Site, or creates an imminent and substantial endangerment to the Village of Milford municipal wells.

On April 14, 2022, EGLE responded to ZF's letters noted above and agreed that the information presented by ZF regarding anomalous conditions in groundwater well OW-16D2 warrants additional investigation by ZF. See Exhibit 3. The April 14th EGLE Letter further supports ZF's plans to prepare a work plan and undertake a parallel path to further redevelop and possibly replace OW-16D2 and offers specific recommendations for the work plan. ZF will incorporate EGLE's recommendations into its work plan for OW-16D2 and will submit the work plan to EGLE for review and comments. ZF will communicate with EGLE regarding our progress on the work plan. The additional redevelopment work and review of OW-16D2 pursuant to the work plan will ensure that any samples from OW-16D2, or its replacement, are based on accurate and reliable, representative data collected from a properly-performing monitoring well in accordance with EGLE requirements and can be appropriately used to determine applicable requirements under Part 201.

ZF refutes the allegation in Section 4.8 of the AO that the presence of vinyl chloride in OW-16D2, and cis-1,2-dichloroethene (DCE) in the Village of Milford municipal drinking water wells, is an indication that the groundwater impacts from the Site are migrating to OW-16D2 and the Village of Milford municipal wells. During the meeting to confer with EGLE on March 31, 2022, pursuant to Section XVIII of the AO, ZF presented information which showed that there is no technical basis for determining that the portion of the groundwater impacts from the Site, beyond the Site's groundwater treatment system extraction wells, is degrading to vinyl chloride and migrating in the direction of OW-16D2 and the Village of Milford municipal wells. The following evidence was presented:

- Vinyl chloride has never been detected in the Village of Milford municipal wells. In the 2009 Remedial Action Plan (RAP) submitted for the Site and during the March 31st meeting, Arcadis presented groundwater velocity calculations ranging from 1.4 feet/day (static) to 76 feet/day (pumping). Based on these calculations, if vinyl chloride was mobile in groundwater near OW-16D2 and moving toward the Village of Milford wells, then it would have been detected in the Village wells several months ago. However, vinyl chloride has not been detected.
- There have been no vinyl chloride detections in off-site monitoring wells; most notably the monitoring wells that have consistently demonstrated the extent of trichloroethene (TCE) in the groundwater from the Site (TCE being the presumed parent chlorinated volatile organic compound (CVOC) for dichlorination daughter products). This includes multi-level wells along Liberty Street

which EGLE believes are downgradient of the Site's groundwater treatment system extraction wells and upgradient of OW-16D2. The Liberty Street wells have shown no detections of vinyl chloride.

- Groundwater modeling showing: (1) the extent of the groundwater impacts from the Site outside of the Village of Milford municipal well capture zone; (2) forward particle tracking showing groundwater flow from the Site to the southwest, away from the Village of Milford wells and OW-16D2 and consistent with the spatial orientation of the groundwater impacts from the Site as defined by monitoring wells and vertical aquifer profiling (VAP) data. The groundwater model was run using the Village of Milford's current average pumping rate and a previously reported higher pumping rate provided by the Milford Department of Public Services and deemed appropriate to assess long-term influence on groundwater flow conditions. In addition, forward particle tracking simulations run with our model, indicate particles released at the former Spiral Industries Part 201 Facility encroach on the ZF monitoring well network on Liberty Street. Based on a review of a recent Baseline Environmental Assessment (BEA) completed at the Spiral Industries site, known CVOC contamination, including vinyl chloride, DCE, and TCE exists and has not been defined beyond the boundaries of the Spiral Industries property.
- The highest reported concentration of vinyl chloride at OW-16D2 was the first detection of 3.5 ug/L in May 2021, which did not subsequently result in a detection in the Village of Milford wells, despite the proximity and high groundwater velocity.
- The results of ongoing monitoring of the groundwater wells at Liberty Street and to the south of Liberty Street that are beyond the influence of the pumping wells, have been consistent with historical data showing no indication of changes over time that would affect contaminant fate and transport.

Beyond the extensive investigation, analysis and ongoing cleanup work being performed by ZF for the Site, there are confirmed sources of CVOC contamination near and upgradient of OW-16D2, which include vinyl chloride and/or other parent CVOCs as a contaminant and there are other known sources of CVOC groundwater contamination in the Village of Milford. The other known sources of CVOCs include the former Spiral Industries Part 201 Facility and the Coe's Cleaners Part 201 Facility. The Spiral Industries Facility in particular, is upgradient of OW-16D2 and the Village of Milford municipal wells and the extent of contamination related to the Spiral Industries Facility has not been defined beyond the property boundary.

The former Spiral Industries Facility is located north of the Village of Milford municipal wells. Based on a BEA submitted to EGLE in June 2014 that ZF has reviewed, concentrations of CVOCs detected at the former Spiral Industries Facility include, but are not limited to: vinyl chloride (soil: 709 ug/kg and groundwater: 280 ug/l), TCE (soil: 2,620,000 ug/kg and groundwater: 153 ug/l), and DCE (soil: 215,000 ug/kg and groundwater: 650 ug/l). Unlike the Site, the extent of groundwater contamination associated with the Spiral Industries Facility has not been defined beyond the property boundary. In our meeting on March 31st, EGLE explained that there are no additional data available to determine the extent of groundwater contamination from the Spiral Industries Facility because the current owner who is redeveloping the property is not required to define hazardous substances beyond what was required for the BEA and no other responsible party under Part 201 has offered or been demanded by EGLE to define the extent of contamination in light of the wellhead protection zone. Given the known information regarding CVOCs present at the Spiral Industries Facility, it seems that additional and complete CVOC delineation related to this site is warranted and would not only help answer some currently unanswered questions about the extent of potential off-site contamination, but is also necessary and appropriate to understand potential impacts on the Village of Milford's municipal wells.

In light of the long working relationship between EGLE and ZF at the Site, potential public health concerns, and the technical anomaly of vinyl chloride being detected recently and intermittently at only one of many monitoring wells in over 25 years, ZF does not understand why EGLE elected to issue this AO without first providing ZF an opportunity to meet with EGLE, and partner together on determining the reason for such a detection at that well, but nowhere else, and any measures to address it. As noted in Paragraph 4.9 of the AO, EGLE sent ZF a Compliance Communication regarding the Site on October 25, 2021 (the "Compliance Communication"). What the AO leaves out however, is that ZF responded to the Compliance Communication in a timely manner by submitting a detailed letter to EGLE on November 23, 2021, raising several technical questions and concerns regarding the Compliance Communication ("ZF's Response Letter"). ZF's letter concluded with the following request for a meeting with EGLE:

"In light of the extensive response actions already undertaken by ZF, the complex history of CVOC contamination in the Village of Milford, and EGLE's request that ZF initiate plans to install treatment on the Milford municipal wells, ZF believes a technical meeting would be a productive next step. Arcadis and ZF have made multiple attempts to schedule such a meeting with EGLE, most recently by calling you on November 9th. ZF would appreciate hearing from you regarding some dates and times that EGLE would be available to schedule a technical meeting." See Exhibit 4, ZF Response to EGLE Compliance Communication.

After some additional attempts to reach EGLE about having a meeting, ZF was finally told that EGLE would be responding to ZF's Response Letter. Over the nearly four months since ZF submitted its Response Letter to EGLE, ZF received email acknowledgements that EGLE had received our sampling results for OW-16D2, but never received a response to ZF's Response Letter or any meaningful feedback from EGLE to address the questions raised by ZF. Instead, EGLE issued the AO to ZF on March 16, 2022. ZF takes all matters that involve threats to human health and the environment seriously and this matter is no exception and this is why ZF requested a meeting several times after receiving the Compliance Communication.

As was described in detail in ZF's Response Letter, and as EGLE is aware, ZF has been performing various investigation and response activities at the Site for over 25 years. See Exhibit 4. During that time, ZF has always responded in a timely manner to EGLE's requests and has willingly taken responsibility for the Site. ZF has actively engaged with EGLE regarding the most appropriate and feasible remediation techniques for the Site and has worked cooperatively with the Village of Milford with respect to the Site as well. Ultimately, ZF and the Village of Milford agreed on a transfer of the Site to the Village in 2014 to facilitate its eventual redevelopment and beneficial use in the community. ZF, EGLE and the Village of Milford have generally enjoyed an open and productive working relationship with the mutual objective of protecting human health, welfare, and the environment.

ZF appreciates that EGLE thoughtfully reviewed and considered the additional information about OW-16D2 that we provided in our recent letters and appreciates that EGLE remains open to reconsidering the AO upon a showing that there is not an imminent and substantial risk to the Village of Milford municipal wells due to the presence of vinyl chloride in groundwater at the location of OW-16D2. ZF intends to continue our long standing working relationship with EGLE and the Village of Milford to ensure that the ongoing activities at the Site to address the AO, including ZF's incorporation into its work plan of the recommendations in the April 14 EGLE Letter, continue to proceed in line with Part 201.

Thank you for your attention to these matters and please include this letter and its attachments in the administrative record for the AO and the Site. If you have any questions, please contact me at the phone number listed in the header on the first page of this letter.

Sincerely,

Kelly M. Martorano

Kelly M. Martorano

ZF Group

Senior Attorney – Environmental, Health & Safety

Enclosures

cc by email only:

- Mr. Scott Detwiler, ZF
- Mr. Robert Bleazard, ZF
- Mr. John McInnis, Arcadis
- Mr. Troy Sclafani, Arcadis
- Mr. Grant Gilezan, Dykema
- Mr. Paul Stewart, Dykema
- Mr. Christian Wuerth, Village Manager, Village of Milford
- Ms. Polly Synk, Michigan Department of Attorney General
- Ms. Danielle Allison-Yokom, Michigan Department of Attorney General
- Mr. Aaron B. Keatley, EGLE Chief Deputy Director, EGLE
- Mr. Kevin Wojciechowski, Project Manager, EGLE
- Mr. Josh Mosher, EGLE Remediation and Redevelopment Assistant Director
- Mr. Dan Yordanich, EGLE
- Ms. Mary Miller, EGLE
- Mr. Darren Bowling, EGLE
- Mr. Paul Owens, EGLE
- Ms. Cheryl Wilson, EGLE
- Ms. Lyndsey Hagy, EGLE
- Ms. Katie Noetzel, EGLE

EXHIBIT 1

 $April\ 8,\ 2022-ZF\ Letter\ RE:\ Additional\ Information\ for\ Consideration\ by\ EGLE$



ZF Active Safety US Inc. 12001 Tech Center Drive, Livonia, Michigan 48150-2122 Department Health Safety and Environmental

From Robert Bleazard
Phone +1 480 722-4866
Email Robert.Bleazard@zf.com

Date April 8, 2022

VIA E-MAIL TO: WojchiechowskiK@Michigan.gov

Kevin Wojciechowski, Project Manager Warren District Office Remediation and Redevelopment Division Michigan Department of Environment, Great Lakes, and Energy 27700 Donald Court Warren, Michigan 48092

RE: ZF Active Safety US Inc. Additional Information for Consideration by Michigan Department of

Environment, Great Lakes, and Energy Related to Administrative Order for Response Activity;

EGLE Docket No. AO-RRD-22-001.

Dear Mr. Wojciechowski,

ZF Active Safety US Inc. (ZF) appreciates the opportunity to meet with the Department of Environment, Great Lakes, and Energy (EGLE) last Thursday, March 31, 2022, to discuss the Administrative Order for Response Activity (AO) issued by EGLE to ZF, with respect to the former Kelsey-Hayes site in Milford, Michigan (the "Site").

As demonstrated by ZF's November 23, 2021 letter in response to EGLE's October 25, 2021 Compliance Communication and its presentation of information at the meeting, ZF and Arcadis have been reviewing the extensive data collected for the Kelsey-Hayes site, as well as any other available information, in order to understand the recent emergence of vinyl chloride in groundwater monitoring well OW-16D2 when that compound has not been detected at any time elsewhere in ZF's off-site monitoring well network in more than 25 years of monitoring. Furthermore, Arcadis recently noted an anomalous response in water level and certain groundwater parameters in the well during sampling, raising concerns regarding the possible integrity of the well screen and/or the sand pack surrounding the well screen. In addition, considering EGLE's concerns regarding the proximity of OW-16D2 to the Village of Milford municipal wells and the statement in the Administrative Order that "the presence of vinyl chloride in monitoring well OW-16D2, a known carcinogen, represents an imminent and substantial endangerment to the public health, safety, welfare, or the environment...," ZF and Arcadis carefully analyzed the current viability of OW-16D2 and began evaluating whether samples collected from this well are representative of the aquifer.

Arcadis initially questioned whether OW-16D2 may be compromised because there was significant drawdown in the well during most of the low-flow sampling events where vinyl chloride was detected and purge volumes were observed to be similar to the volume of standing water removed from the well. This indicated stagnant water conditions in the well. In addition, water samples with vinyl chloride detections had an oxidation reduction potential (ORP) in the range of -60 to -134 millivolts and low dissolved oxygen (DO) levels (see attached Table 1 – Attachment 1). These conditions within the well provide a reducing environment where anerobic microbes are active and reductive dichlorination of chlorinated volatile organic compounds (CVOCs) can occur (i.e., cis-1,2-dichloroethene to vinyl chloride). Furthermore, vinyl chloride has not been detected in the

six observation wells, OW-9, OW-09ML-A/B/C/D, and MW-03-94, located upgradient of OW-16D2, in the Village of Milford drinking water wells, or in any of the other monitoring wells regularly sampled by Arcadis that have proven to be reliable in monitoring other CVOCs including trichloroethene (TCE). Collectively, these multiple lines of evidence are what caused Arcadis to take a closer look at the condition of OW-16D2 and also suggests that the recent detection of vinyl chloride in OW-16D2 is localized, anomalous, and warrants further evaluation. The inability of OW-16D2 to sustain EGLE's low-flow sampling and groundwater parameter stabilization requirements also indicates that groundwater samples collected from OW-16D2 are: 1) not representative of groundwater conditions; 2) not comparable to EGLE's Part 201 Cleanup Criteria for compliance purposes; and 3) therefore not a reliable basis for the conclusion by EGLE that OW-16D2 poses an imminent and substantial endangerment to the Village of Milford wells.

As Arcadis has previously discussed with you and as mentioned during the meeting, ZF's monitoring well OW-16D2 was further examined and redeveloped on Friday, April 1st with the objective of improving hydraulic communication between the well and formation to produce representative groundwater samples. During the examination and redevelopment of OW-16D2, Stearns, the well driller, used a surge block with a vacuum hose attachment to work up and down within the well screen and draw out sediments consistent with standard practice. Stearns moved this apparatus up and down within the well screen several times. During the process, there was initial discolored water and some fine sediment removed and then it cleared up. The plan was to then drop a pump down the well and purge water/groundwater as it re-entered the well, removing as much water as possible. However, after pulling the surge block apparatus out of the well, there was only about 2 feet of water remaining in the well (approximately 1/3 gallon). The amount of water in the well when Stearns started the redevelopment process was about 100 feet (approximately 16 gallons). This indicates that the well screen, sand pack, and/or formation around the screen is not functioning as designed. Arcadis measured the level of water in the well after this work and it recovered very slowly, at a rate of less than 1 foot per hour. Based on these observations, it appears that the water in the screened interval of the well was stagnant and therefore not fully representative of groundwater conditions in the aquifer. These well redevelopment findings, combined with the observations noted above regarding well behavior during sampling, indicate that OW-16D2 has become compromised and cannot be relied on for continued groundwater monitoring without further evaluation and potential corrective action on the well.

Following the redevelopment, Arcadis returned to sample OW-16D2 on Monday, April 4th and observed that the depth to groundwater was about 50 feet (so about 50 feet had recovered over the weekend). Arcadis used a low-flow bladder pump to purge the well (this took about 2 hours) and then sampled the well. The total drawdown of the well was approximately 7 feet during the sampling. Arcadis observed the water level in OW-16D2 to be relatively level for the last 10 minutes prior to sampling, indicating that the recharge was coming from the aquifer and not stagnant water within the well. One set of groundwater samples was collected on April 4th and was dropped off at Fibertec (Holt, Michigan) the same day, with a requested 48-hour turn-around-time and another set of samples was sent to Eurofins-TestAmerica for analysis under a standard turn-around-time. Analysis for volatile organic compounds using EPA Method 8260 was requested for both sets of samples.

The results from the Fibertec samples were returned on April 6th and as you know, were non-detect (less than 1.0 ug/L detection limit) for vinyl chloride. In contrast, cis-1,2-dichloroethene, trans-1,2-dichloroethene, and 1,1-dichloroethane were detected and the concentrations of these other CVOCs were consistent with previous samples collected from OW-16D2, indicating that these compounds are stable in the formation water that entered OW-16D2 after development and are not degrading to vinyl chloride in the vicinity of OW-16D2. The laboratory

ZF Active Safety US Inc.

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analytical report (Attachment 2) was provided to you on April 6th. These findings, combined with the previous OW-16D2 sampling results and the well redevelopment observations described above show that the production of vinyl chloride appears to be a function of stagnant water within the well caused by the malfunctioning well itself. Additional samples from OW-16D2 will be collected on April 8th and April 18th. Arcadis will sample the well under as close to low-flow conditions as the well is able to sustain and will promptly report the results to EGLE.

Based on the observed conditions of OW-16D2 during the recent sampling and redevelopment of the well and the historical information provided above, there is an objectively reasonable and technical basis to conclude that the recent samples collected before the redevelopment of the well should not be relied upon as accurate representations of aquifer conditions in that location. Specifically, the following observations point to a lack of reliability for recent vinyl chloride results collected from OW-16D2:

- Inability of the OW-16D2 monitoring well to sustain low-flow purging/sampling consistent with EGLE guidelines;
- Recent consistent reducing conditions (i.e., negative ORP, low DO) with stagnant water conditions observed
 in OW-16D2, correlating with the observance of vinyl chloride detections that have improved after well
 redevelopment;
- The first occurrence of vinyl chloride in May 2021 after more than 25 years of monitoring, and its subsequent lack of detection following redevelopment of OW-16D2; while other CVOCs in OW-16D2 remained consistent with historical results:
- Continuing lack of vinyl chloride detections in any other monitoring wells, notably those that have unquestionably demonstrated the extent of TCE impacts, the presumed parent CVOC for dichlorination daughter products;
- Lack of vinyl chloride detections in Village of Milford municipal wells despite groundwater velocity calculations showing it would have arrived months ago if mobile.

Collectively, these findings provide compelling evidence of data quality concerns for OW-16D2 that must be further evaluated and corrected. It is imperative that any conclusions drawn from OW-16D2 sample results and determinations of potential additional response activities are based on accurate and reliable, representative data collected from a properly-performing monitoring well in accordance with EGLE requirements. Therefore, ZF intends to continue to evaluate OW-16D2 and collect additional data for this well which will be expedited and reported to EGLE as soon as available. We are planning to re-sample OW-16D2 on April 8th one week following redevelopment as previously discussed with you via email on April 1st. OW-16D2 will also be sampled again on April 18th.

In addition to the additional monitoring planned for OW-16D2, ZF is also evaluating potential corrective measures for the well including, further well rehabilitation using an approvable drinking water well additive as was communicated with EGLE via email on April 4th, and a downhole camera survey of the well. ZF is also evaluating potentially replacing OW-16D2 if the rehabilitation is not feasible or not successful, as you suggested. Such corrective measures would include a work plan that would be submitted to EGLE for review and approval, and careful coordination with the Village of Milford to ensure protection of the municipal wells.

In light of the recent findings regarding OW-16D2 detailed above and considering that the basis for the AO is EGLE's determination that the vinyl chloride reported in recent samples from OW-16D2 above the Part 201 Drinking Water Criterion, pose an imminent and substantial endangerment to the Village of Milford municipal wells due to their proximity to OW-16D2, it would be prudent for all parties to have reliable data and an objective basis for decisions moving forward. Allowing ZF more time to remedy OW-16D2 and collect accurate data from the well will allow the parties to make a proper technical determination of whether vinyl chloride is in the aquifer at the location of OW-16D2. This information would also provide a strong basis to determine if there is any reasonably objective and technical need to implement the response activity required by the AO and would further serve to inform future discussions and decisions by EGLE, the Village of Milford, and ZF. ZF will follow-up this correspondence with the sample results to be collected from OW-16D2 on April 8th, which we expect to receive from the lab by April 12th, and with our plans to implement the OW-16D2 rehabilitation and/or replacement as necessary. ZF will also provide a formal response to the AO, but wanted to provide you with this recently obtained additional information for your consideration at this time.

Thank you for your attention to these matters and please include this letter and its attachments in the administrative record for the AO and the Site.

If you have any questions, please feel free to contact me at the phone number listed in the header on the first page of this letter, Mr. Scott Detwiler – ZF Project Manager at 480-722-4139, or Mr. John McInnis of Arcadis at 248-994-2285.

Sincerely,

Robert Bleazard

Sr. EHS Manager – Environmental Remediation

ZF Health, Safety, and Environment

Robert A Bleazane

Enclosure

cc by email only:

Mr. Scott Detwiler, ZF

Mr. Robert Bleazard, ZF

Ms. Kelly Martorano, ZF

Mr. John McInnis, Arcadis

Mr. Troy Sclafani, Arcadis Mr. Grant Gilezan, Dykema

Mr. Paul Stewart, Dykema

Mr. Christian Wuerth, Village Manager, Village of Milford

Ms. Polly Synk, Michigan Department of Attorney General

Ms. Danielle Allison-Yokom, Michigan Department of Attorney General

Mr. Aaron B. Keatley, EGLE - Chief Deputy Director, EGLE

Mr. Mike Neller, EGLE - Remediation and Redevelopment Director

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Page 5 of 5 April 8, 2022

Mr. Josh Mosher, EGLE – Remediation and Redevelopment Assistant Director

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ATTACHMENT 1

Table 1 OW16D2 Groundwater Analytical Results and Field Parameters Former Kelsey-Hayes Milford Plant



Sample Identification:		Groundwater Surface Water Interface								Obs	ervation	Well OW-	16D2								
Sample Collection Date:	Criteria	Criteria	6/15/2010	12/17/2010	6/15/2011	12/14/2011	6/29/2012	12/12/2012	6/12/2013	12/11/2013	6/15/2014	11/24/2014	6/24/2015	12/9/2015 ¹	6/14/20161	12/13/2016	12/6/2017	6/12/2018	12/4/2018	6/10/2019	12/3/2019
Tetrachloroethene	5.0 (A)	60 (X)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	5.0 (A)	200 (X)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	70 (A)	620	2.4	3.2	2.1	<1.0	1.4	12	<1.0	3.4	<1.0	22	<1.0	19	<1.0	1.7	18	<1.0	4.1	1.2	1.1
trans-1,2-Dichloroethene	100 (A)	1,500 (X)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.3	<1.0	1.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	880	740	<1.0	<1.0	1.1	<1.0	<1.0	2.1	<1.0	<1.0	<1.0	3.0	<1.0	2.3	<1.0	<1.0	1.9	<1.0	2.1	1.6	1.4
Vinyl chloride	2.0 (A)	13 (X)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Field Parameters																					
Drawdown (feet)			-0.3	2.8	0.0	1.5	0.0	0.0	0.0	0.0	0.0	1.3	0.4	5.1	4.7	12.2	8.4	4.6	5.5	8.5	3.5
pH (standard units)			7.36	7.74	7.82	7.44	7.60	7.57	7.90	7.85	7.17	7.79	7.82	7.56	7.62	7.91	8.05	7.67	7.41	7.87	7.82
Conductivity (milliSiemens pe	r centimenter)		0.59	0.56	0.64	0.54	0.64	0.60	0.64	0.59	0.60	0.80	0.634	0.952 1	0.827 1	0.604	0.63	0.64	0.62	0.64	0.82
Turbidity (Nephelometric Turb	idity Unit)		1.09	4.22	3.67	0.76	3.68	2.24	0.60	2.43	2.19	102	2.27	52.1	0.61	1.36	11.7	0.80	2.2	3.06	0.79
Dissolved Oxygen (milligrams	per liter)		1.33	0.47	0.11	1.44	0.58	0.8	1.19	3.45	4.99	3.8	4.08	0.19	3.22	0.38	0.3	3.04	1.21	0.25	11.74
Temperature (degrees Celsiu	s)		14.66	9.23	15.71	10.33	17.45	9.90	15.19	10.39	14.72	10.83	14.1	11.75	13.89	11.33	10.6	14.60	10.96	12.7	8.6
Oxidation Reduction Potential	(millivolt)		75	-12.5	78.3	12.7	125.1	110.6	115.1	115	82.4	-17.4	-39.1	-155.3	27.7	101.4	-121.6	203.7	159.9	231.9	122

Sample Identification:	Residential Drinking Water	Groundwater Surface Water Interface								Observa	tion Wel	OW-16D	2							
Sample Collection Date:	Criteria	Criteria	5/13/2020	11/17/2020	5/13/2021	6/8/2021	8/3/2021	8/16/2021	9/1/2021	9/13/2021	9/27/2021	10/11/2021	10/25/2021	11/8/2021	12/6/2021	1/4/2022	1/25/2022	2/17/2022	3/21/2022	4/4/2022
Tetrachloroethene	5.0 (A)	60 (X)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	5.0 (A)	200 (X)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	70 (A)	620	<1.0	<1.0	17	10	16	13	16	20	18	12	17	17	8.2	15	15	12	18	19
trans-1,2-Dichloroethene	100 (A)	1,500 (X)	<1.0	<1.0	1.3	<1.0	1.6	1.1	1.3	1.7	1.7	1.1	1.6	1.5	<1.0	1.6	1.4	1.1	1.6	1.7
1,1-Dichloroethane	880	740	<1.0	<1.0	3.8	2.4	3.8	3.0	3.2	3.9	3.7	2.8	3.8	4.2	2.0	3.0	3.4	3.1	3.7	3.5
Vinyl chloride	2.0 (A)	13 (X)	<1.0	<1.0	3.5	1.2	3.0	1.8	1.7	1.6	1.8	1.4	1.5	1.5	<1.0	2.5	3.2	2.0	2.3	<1.0
First Depth to Water																				
Field Parameters																				
Drawdown (feet)			4.2	10.2	0.0	0.0	12.7	14.2	15.0	10.6	13.7	15.2	8.1	10.9	7.5	8.1	17.4	17.4	7.1	6.9
pH (standard units)			8.51	8.44	7.89	7.6	7.5	7.68	7.64	7.28	7.38	7.81	7.49	7.43	8.02	7.56	7.54	7.77	7.54	7.43
Conductivity (milliSiemens pe	er centimenter)		0.78	0.71	0.93	0.85	0.93	0.718	1.011	1.03	1.07	0.97	1.09	1.07	0.84	1.1	1.11	0.985	1.082	1.1
Turbidity (Nephelometric Turt	oidity Unit)		2.29	1.08	59.6	5.29	33.8	6.82	3.86	3.9	9.44	9.05	10.7	10.1	4.74	28.4	13.7	4.9	3.04	96.3
Dissolved Oxygen (milligrams	s per liter)		4.9	9.67	0.45	0.41	1.32	0.25	0.38	0.86	0.22	0.58	0.15	0.17	0.27	0.2	0.1	0.57	0.51	5.81
Temperature (degrees Celsiu	is)		11.6	12.3	12.2	17.4	15.6	14.1	15	14.1	15	15.5	12.4	14	10.8	10.8	9.8	9.9	10.4	7.1
Oxidation Reduction Potentia	l (millivolt)		155.1	12.1	-134	-104.1	-99	-139.1	-74.7	-64.8	-89.9	-99.2	-88.2	-66.4	-14	-93.1	-96.7	-61.3	-72.3	3.0

Notes:

All volatile organic compound concentrations are in micrograms per liter (µg/L).

(A) Criterion is the State of Michigan Drinking Water Standard established pursuant to Section 5 of the Safe Drinking Water Act No. 399 of the Public Acts of 1976.

(X) The Groundwater Surface Water Interface (GSI) criterion shown is not protective for surface water that is used as a drinking water source.

1 Specific Conductivity

ATTACHMENT 2



Wednesday, April 06, 2022

Fibertec Project Number:

A07755

Project Identification:

TRW Milford ZF Active Safety (30046730) /30046730

Submittal Date:

04/04/2022

Mrs. Marina Samp Arcadis U.S., Inc. - Novi 28550 Cabot Drive Suite 500 Novi, MI 48377

Dear Mrs. Samp,

Thank you for selecting Fiberiac Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345;

Sincerely,

By Soo Ricketts at 12:26 PM, Apr 86, 2022

For Daryl P. Strandbergh Laboratory Director

Enclosures



Order: Page: Date: A07755 2 of 10 04/06/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: FIELDBLANK_040422 Chain or Clustody: 201041

Client Project Name: TRW Milliord ZF Active Safety (30046730)

Client Project No. 30046730 Sample Maint: Blank: Field Collect Time: 11:45

Sample Comments:

Definitions: 0: Qualifier (see definitions at end of report) NA: Not Applicable 4: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Aliquot ID: AU7755-001 Matrix: Blank: Field Method: EPA 5030C/EPA 8260D Description: FIELDBLANK 040422

Paramelor(s)	Résult	o	Units	Reporting Limit	Dhutton	Prepa P. Date	ration P. Balch	A. Date	alysis A. Batch	"Ville
1.Acetone	0	3.5	µg/L	50	1.0	04/05/22	V122005B	04/05/22 00:21	V1220069	JME
1 2.Adylonitrie	U.		pg/L	2.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	V)220068	JIME
3.Bergana	U.		pp/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 00:21	V122005B	JAME
4. Bromoberize ne	U.		pg/L	1.0	1.0	84/05/22	V122D05B	0405/22 00:21	V122D05B	JME
5. Bromochloromethane	U		PD/L	1.0	1.0	04/05/22	V122005B	0406/22 00:21	V122006B	JMF
6. Bromodichioromethane	U		pg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	V122005B	JMF
7. Bromotorm	H		pays.	10	1.0	04/05/22	VI22D05B	0405/22/00:21	V122D05B	JMF
8, Bromomethane	Ц	V-	pg/L	5.0	1.0	04/05/22	V122D05B	04/06/22 00:21	V122005B	JMF
9.2-Butanone	U		μg/L	25	1.0	04/05/22	VI22005B	04/05/22 00:21	V/22005B	JIME
10. n-Buly/benzene	U		pg/L	1.0	1,0	04/05/22	VI22005B	04/06/22 00:21	V122005B	JMF
11. sec-Buly/benzene	H		pg/L	10	1.0	04/05/22	V122D05B	0405/22 00:21	V122D05B	JMF
12. teri-Butylberwene	Ų		pg/L	1.0	1.0	04/05/22	V122D05B	04/06/22 00:21	V122005B	JMF
13, Carbon Disultide	ш		jig/L	5.0	1.0	04/05/22	VI22065B	0406/22/00:21	V1220059	JMF
14. Carbon Tetractionide	U		pg/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 00:21	VI22005B	JIME
15. Chloroberzene	U.		µg/L	1.0	1.0	04/05/22	V122D05B	04/05/22 00:21	V122005B	JMF
16. Chloroe thane	U		pp/t.	5.0	1.0	04/05/22	VI22D05B	04/05/22 00:21	V1220058	JME
17, Chloroform	B		µg/L	1.0	1.0	04/05/22	VI22005B	04/05/22 00:21	V/220058	JIMF
18. Chloromethane	U	N-	HQT.	5.0	1,0	04/05/22	VI22005B	04/06/22 00:21	V122D05B	JIME
19.2-Chlorolouene	- 0		µg/L	5.0	1.0	04/05/22	VI22005B	04/06/22 00:21	V1220068	JMF
z 20.1,2-Dibromo-3-chloropropane (SIM)	0		HD/L	1.0	1.0	04/05/22	V122D05B	04/05/22 00:21	V122D05B	JMF
21. Dibromochioromethane	H		pg/L	5.0	1.0	04/06/22	V122D05B	04/05/22 00:21	V122D05B	JIME
22. Dibromomethane	U		µg/L	5.0	1.0	04/05/22	VI22D05B	04/05/22 00:21	V/22/005B	JIME
23. 1,2 Dichioropenzene	U		pg/L	1.0	1.0	04/05/22	VI22005B	04/06/22 00:21	V1220059	JMF
24.1,3-Dichlorobenzene	- 13		pgr	1.0	1.0	84/05/22	V122D05B	04/05/22 00:21	V122D05B	JME
25.1,4-Dichlorobenzene	U.		PDYL	1.0	1.0	04/05/22	V122005B	0406/22 00:21	V122005B	JASE
26. Dichlorodituoromethane	U		µg/L	5.0	1.0	04/05/22	VI22005B	04/06/22 00:21	V122005B	JMF
27.1.1-Dichloroethane	U		ha/r	1.0	1.0	04/05/22	VI22005B	0405/22 00:21	V/22D058	JMF
28.1,2-Dichloroethane	U		µg/L	1.0	1.0	04/05/22	V122D05B	04/06/22 00:21	V 122005B	JME
29. I,1-Dichioroethene	U		HD/L	10	1.0	04/05/22	VI22D05B	0406/22 00:21	V122D058	JMF
30. cis-1,2-Dichioroethene	U		pg/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 00:21	V122005B	JMF
31, Irans-1,2-Dichloroethene	ш		µg/L	1.0	1.0	04/05/22	V122005B	04/05/22 00:21	V)220058	JIME
32: 1,2-Dichloropropane	U		µg/L	1.0	1.0	04/05/22	V122D05B	04/06/22 00:21	V/220068	JMF
33. cts-1,3-Dichloropropene	U		µg/L	0.50	1.0	04/05/22	VI22D05B	04/05/22 00:21	V122005B	JM
34. trans-1,3-Dichioropropene	U.		pg/L	0.50	1.0	04/05/22	V122D05B	04/05/22 00:21	V122D05B	JMF
35, Etrythenzene	Ü		µg/L	1.0	1.0	04/05/22	VI22005B	04/06/22 00:21	V/22005B	JIME
36. Ethylene Dibromide	ш		pg/L	1.0	1.0	04/05/22	V122D05B	04/06/22 00:21	V122005B	JMF

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Codillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368 F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584



Order: Page: Date:

A07755 3 of 10 04/05/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: FIELDBLANK 040422

Blank: Fleid

Chain of Custody: Collect Date:

201041

Client Project No. 30046730

Client Project Name: TRW Millord ZF Active Salety (30046730)

Sample No: Sample Matrix

Called Time:

04/04/22

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable :: Parameter not included in NELAC Scope of Analysis.

11:45

Volatile Organic Compounds (VOCs) by GC MS Mairtx: Blank: Fleid Allquot ID: A 07755-001

Method: EPA 5030C/EPA 8260D Description: FIELDBLANK_040422

Paramelenisi	Result	a	Units	Reporting Limit	Dilutton	Propa P. Date	ration P. Balch	A. Date	alysis A Batch	Init
37.2-Hexamine	N.	E2200	port	50	1,0	04/05/22	VI22005B	04/05/22 00:21	V122D06B	JM
38. Isopropyibenzene	U		µg/L	5.0	1.0	04/05/22	VI22005B	04/06/22 00:21	V122006B	JM
59, 4-Methyl-2-pentanone	U		µg/L	50	1,0	04/05/22	VI22005B	04/05/22 00:21	V122D068	JM
40. Methylene Chloride	U		pg/L	5.0	1.0	04/05/22	VI22005B	04/06/22 00:21	V122006B	JM
# 41,2-Melhytnephinslene	U		MOVE.	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	V/22/0068	UMB
42.MTBE	0		µg/L	5.0	1.0	04/05/22	V122D05B	04/06/22 00:21	V122D05B	JIME
43.Naphthalene	U		µg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22:00:21	V122006B	JME
44, n-Propy/benzene	U		pg/L	1.0	1.0	04/05/22	VI22005B	04/05/22 00:21	VI22006B	JM
45. Styrena	U		µg/L	1.0	1.0	04/05/22	VI22005B	04/06/22 00:21	VI220058	JM
45.1,1,1,2-Tetrachloroethane	U		µg/L	1.0	5.0	04/05/22	VI22D05B	04/06/22 00:21	V122D06B	JM
47, 1,1,2,2-Tetrachtoroethane	N.		pg/L	1.0	1.0	04/05/22	VI22005B	04/06/22 00:21	V (220)058	JM
48, Tetrachioroethene	U		µg/L	1.0	1,0	04/05/22	VI22005B	04/06/22 00:21	V122D06B	JM
49. Toluene	U		µg/L	1,0	1.0	04/05/22	V122D05B	04/06/22 00:21	VI22D068	JM
50.1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	V 122006B	JM
51.1,1,1-Trichloroethane	U		pg/L	10	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22005B	JM
= 52,1,1,2-Trichloroethane	U		PD/L	100	1.0	04/05/22	VI22D05B	04/06/22 00:21	V122D05B	JM
53. Trichloroethene	U		µg/L	1.0	1.0	04/05/22	V122005B	04/06/22:00:21	V122005B	JME
54. Trichkroftuorome thane	U		pp/i_	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	V122006B	JAM
55.1,2,3-Trichloropropane	U		µg/L	1.0	5.0	04/05/22	VI22005B	0496/22 00:21	V122006B	JM
56.1,2,3-Trimethylbenzene	U		pg/L	1.0	1.0	04/05/22	V122D05B	04/06/22 00:21	V122006B	JM
57. 1.2.4-Trimethylbenzene	-0		ug/t.	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	V122D06B	JM
58.1,3,5-Trimethylbenzene	Ð		pg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	V122D05B	JIM
59, Vinyl Chiodde	:8		µg/L	1.0	3.0	04/05/22	VI22005B	04/06/22 00:21	V122D058	am
60. māp-Xylene	,U		pay.	2.0	9.0	04/05/22	VIZ2D05B	04/05/22 00:21	V/22006B	JM
61.o-Xylane	U		HOL	1.0	1.0	04/05/22	VI22005B	04/06/22/00:21	V122D058	JM
F 62 Xylenes	υ		po/L	3.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	V122D05B	JMF



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Client Identification: Arcadis U.S., Inc. - Nov! Sample Description: OW-16D2_040422 Chain of Custody: 201041
Client Project Name: TRW Milliord ZF Active Salety Sample No: Collect Date: 04/04/22

(30046730) Sample Mains: Ground Water Collect Time: 11:55

Sample Comments:

Client Project No.

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable :: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS
Alliquot ID: A07755-002 Matrix: Ground Water
Method: EPA 5030C/EPA 8260D
Description: OW-16D2_040422
Preparation A

Parameter(s)	Result	a	Units	Reporting Limit	Dilution	Prepa P. Date	ration P. Batch	An Date	alysis A. Balch	init
1,Acetone	U.		pg/L	150	1.0	04/05/22	VI22D05B	04/06/22 02:59	V1220058	JM
1 2.Acrylontinie	U		pp/L	2.9	1.0	04/05/22	VI22D05B	04/05/22 02:59	V1220058	JM
3. Bergene	U		µg/L	1.0	1.0	04/05/22	VI22005B	04/05/22 02:59	V (220058	JMP
4. Bromobenze ne	U		PQ/L	1.0	1,0	04/05/22	V122D05B	04/06/22 02:59	V122D05B	JIME
5. Bromochioromethare	Ü		HO'L	1.0	1.0	04/05/22	V22005B	04/05/22 02:59	V/22005B	JM
6. Bromodichloromethane	U		HD/E	1.0	1.0	04/05/22	V122D05B	04/06/22 02:59	V122005B	JM
7. Bromoform	U		HQ/L	1.0	1.0	04/05/22	V122005B	04/06/22 02:59	V (220059	JM
8. Bromomethane	u	V-	h0/L	5.0	1.0	04/05/22	V122D05B	04/06/22 02:59	V1220058	JM
9.2-Butanore	U		pg/L	25	1.0	04/05/22	VI22D05B	04/06/22 02:59	V1220058	JM
10. n-Bulylbenzene	0		Hg/L	1.0	1.0	04/05/22	V122D05B	04/06/22 02:59	V122005B	JM
11, sec-Buly/benzene	U		µg/L	1.0	1.0	04/05/22	V122005B	04/06/22 02:59	V1220059	JM
12, terl-Buty/berzene	U		HQ/L	1.0	1.0	04/05/22	V122D05B	04/05/22 02:59	V/22005B	JM
13. Carbon Disulfide	U		pp/L	5.0	1.0	04/05/22	V122D05B	04/05/22 02:59	V122005B	JM
14. Carbon Tetrachloride	U.		pg/L	1.0	1.0	04/05/22	V122D05B	04/05/22 02:59	V122D05B	JM
15. Chloroberzene	U		µg/L	1.0	1.0	04/05/22	VI22005B	04/06/22 02:59	V/22005B	.IM
16. Chiorpe thane	Ü		µg/L	5.0	1,0	04/05/22	VI22005B	04/06/22 02:59	V122005B	JM
17, Chloroform	H		pg/L	1.0	1.0	04/05/22	V122D05B	04/05/22 02:59	V122D05B	JM
18. Ohloromethane	U	M-	pg/L	5.0	1.0	04/05/22	V122D05B	04/06/22 02:59	V122005B	JM
19.2-Chlorotatuene			pg/L	50	1.0	04/05/22	VI22D05B	0406/22 02:59	V1220058	JM
20.1,2-Dibromo-3-chloropropane (SIM)	U		pg/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 02:59	V 122005B	JM
21, Dibromochipromethane	U		µg/L	5.0	1.0	04/05/22	VI22005B	04/06/22 02:59	V1220059	JM
22. Dibromomelhane	U		pp/L	5.0	1.0	04/05/22	VI22D05B	04/05/22 02:59	V (220058	JM
23. 1,2-Dichlorobenzene	U		µg/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 02:59	V122005B	JM
24.1.3 Dichlorobenzene	U		HQ/L	1.0	1.0	04/05/22	VI22005B	94/06/22 92:59	V122D058	JM
25. 1,4 Dichicropenzene	Ü		HOYL	1.0	1.0	04/05/22	V122D06B	04/06/22 02:59	V (22005B	JIM
26. Dichlorodifluoromethene	0		HD/L	5.0	1.0	04/05/22	V122D05B	04/05/22 02:59	V122005B	JM
27.1,1-Dichie celhane	3.5		pg/L	10	1.0	04/05/22	V122D05B	04/05/22 02:59	V122D05B	JM
28.1,2-Dichloroethane	U		pg/L	1.0	1.0	04/05/22	V122D05B	04/06/22 02:59	V/22/005B	JIM
29.1,1-Dichiproelhene	Ш		pg/L	1.0	1.0	04/05/22	VI22005B	04/06/22 02:59	V1220058	JM
30. cls-1,2-Dichiproethene	19		PD/L	1.0	1.0	04/05/22	V122D05B	04/05/22 02:59	V122005B	JM
31, trans-1,2 Dichloroethene	1.7		pg/L	1.0	1.0	04/05/22	V122D05B	04/06/22 02:59	V122005B	JM
32.1,2 Dichloropropane	Ш		hb/r	1.0	1.0	04/05/22	VI22D05B	04/05/22 02:59	V1220058	JM
33, cis-1,3-Dichioropropene	D		hD/r	0.50	1.0	04/05/22	VI22005B	04/05/22 02:59	V (22D058	JM
34. trans-1;3-Dichioropropene	Ü		hQ/L	0.60	1,0	04/05/22	VI22005B	04/05/22 02:59	V122D05B	JIM
36. Ethybercane	ш		(4 1 /1	10	1.0	04/05/22	VI22005B	04/05/22 02:58	V1220058	JM
36. Ethylene Dibromide	υ		HD/L	120	1.0	04/05/22	V122D05B	04/06/22 02:59	V122D05B	JM

1914 Hollaway Drive 11766 E. Grand River 8660 S. Mackingw Trail Holt, MI 48842 Brighton, MI 48116 Codillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368 F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584



Order. Page: Date:

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Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2 040422

Chain of Custody:

201041

Client Project Name: TRW Millord ZF Active Safety

Sample No:

Collect Date:

04/84/22

Client Project No:

(30046730) 30046738

Sample Matrix:

Ground Water

Collect Time:

11:55

Sample Comments:

Definitions:

Q: Qualifler (see definitions at end of report) NA: Not Applicable +: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Method: EPA 5030C/EPA 8260D

Allquot ID:

A07755-002

Mairtx: Ground Water

Description: OW-16D2_040422

						Prepa	ration	An	alysis .	
Parameter(s)	Result	0	Units	Reporting Limit	Dilutton	P. Dale	P. Batch	A. Date	A. Batch	init
37.2-Hexanone	U		pgt	50	1.0	04/05/22	VI220058	04/06/22 02:59	V/220059	JMF
38. isopropyibenzene	U		µg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	V122005B	JME
39, 4-Melhyl-2-pentanone	U		pg/L	50	1.0	04/05/22	V122D05B	04/05/22 02:59	V122D05B	JMF
40. Methylene Chloride	U		pg/L	5,0	1.0	04/05/22	V122D05B	04/06/22 02:59	V122005B	JMF
# 41, 2-Melnymaphthalene	U		pg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	V122D058	JMF
42.MTBE	U		µg/L	5.0	1.0	04/05/22	VI22D05B	04/05/22 02:59	VI22D05B	JMF
43. Naphihalene	U		µg/L	5.0	1.0	04/05/22	VI22005B	04/06/22 02:59	V122005B	JAN
44, n-Propylberizane	LI LI		pg/L	1.0	1.0	04/05/22	VI22D05B	04/05/22/02:59	V1220058	JME
45. Styrene	U		µg/L	1.0	Y.D.	04/05/22	VI22D05B	04/05/22 02:59	V122005B	JME
45.1.1,1.2 Tetrachloroethane	U		HQ/L	1.0	1.0	04/05/22	V122D05B	04/06/22 02:59	V122D05B	JIME
47. 1,1,2,2-Tetrachloroethane	0		µg/L	1.0	1.0	04/05/22	V122D05B	04/05/22 02:59	V/22005B	JIME
49. Tetrachioroethene	U		µg/L	1.0	1.0	04/05/22	V122D05B	04/05/22 02:59	V122D05B	JME
49. Toklene	U.		pp/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 02:59	V122D05B	JIME
50.1,2,4-Trichiorobetzene	U		HQYL	5.0	1.0	04/05/22	VI22D05B	04/05/22 02:59	V/22/005B	JIME
51, 1,1,1-Trichloroethane	U		pg/L	1.0	1.0	04/05/22	V122005B	04/06/22 02:59	V1220059	JM
1 52.1,1,2-Trichloroethane	U.		pg/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 02:59	V122D05B	JMF
53. Trichloroethene	U		HAT	10	1.0	04/05/22	V122005B	04/06/22 02:59	V122005B	JMF
54. Trichlorofluoromethane	U		µg/L	1.0	1.0	04/05/22	VI22005B	04/06/22 02:59	V122005B	JIME
55. 1,2,3-Trichloropropane	U		µg/L	1.0	1.0	04/05/22	VI22005B	04/05/22 02:59	V1220059	JMF
1 56.1,2,3-Trimethylbenzene	Ü		µg/L	1.0	1.0	04/05/22	VI22005B	04/06/22 02:59	V122D06B	JMF
57.1,2,4-Trime thytoenzene	U		HD/L	10	1.0	04/05/22	VI22D05B	04/05/22 02:59	V122D058	JIME
58.1,3,5-Trimethylbenzene	U		pg/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 02:59	V122005B	JMF
59.Vinyi Chloride	U		pg/L	1.0	1.0	04/05/22	V122005B	04/06/22 02:59	V1220058	JIME
50.m&p-Xylene	ш		pp/L	2.0	1.0	04/05/22	VI22D05B	04/05/22 02:59	V1220058	JME
61.o-Xylene	U		µg/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 02:59	V122005B	JM
1 62.Xylenes	ti.		pg/L	3.0	1.0	04/05/22	V122D05B	04/06/22 02:59	V122006B	JM



Order. Page: Date:

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Client Identification: Arcadis U.S., Inc. - Novi

Sample Description: EQUIPMENTBLANK_040422

Chain of Custody:

201041

Client Project Name: TRW Milliord ZF Active Safety

Sample No:

Collect Date:

04/84/22

Client Project No.:

(30046730)

Sample Matrix:

Blank: Equipment

Collect Time:

12:10

Sample Comments:

Definitions:

Q: Clualifler (see definitions at end of report) NA: Not Applicable #: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Method: EPA 5030C/EPA 9260D

30046738

Allquot ID:

A07755-003

Maurk: Blank: Equipment

Description: EQUIPMENTBLANK_040422

Parameter(s)	Result	0	Units	Reporting Limit	Dilution	Prepa P. Dale	ration P. Balch	A. Date	A. Batch	ini
T.Acetone	U		pyL	50	1.0	04/05/22	VI220058	04/05/22 00:48	V /22005/9	JW
2.A crylonitrie	U		µg/L	2.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	V122005B	JN
3. Bergene	Ш		pg/L	1.0	1.0	04/05/22	V122D05B	04/05/22 00:48	V122D05B	JN
4. Bromobenzene	ш		pg/L	1.0	1.0	04/05/22	V122D05B	04/06/22 00:48	V122005B	JA
5. Bromochkromethane	U		pp/L	10	1.0	04/05/22	VI22D05B	04/06/22 00:48	V122D058	JA
6. Bromodicnioromethane	U		pg/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 00:48	VI22005B	JH
7. Bromotom	U		MB/T	1.0	1.0	04/05/22	VI22005B	04/06/22 00:48	V (22005B	J
8. Bromome marie	Ш	V-	pg/L	5.0	1.0	04/05/22	VI22D05B	04/05/22 00:48	V1220058	ال
9.2-Butanone	ш		µg/L	25	1.0	04/05/22	V122005B	04/06/22 00:48	V1220059	J
10. n-Buty/benzene	U		pg/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 00:48	V/22005B	JI
11.sec-Buly/benzene	U		µg/L	1.0	1.0	04/05/22	V122D05B	04/06/22 00:48	V 122005B	J
12, teri-Buty/benzene	ш		pp/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 00:48	V (220058	ال
13, Carbon Disuttide	U		µg/L	5.0	1.0	04/05/22	VI22005B	04/05/22:00:48	V/220068	J
14. Carbon Tetrachloride	U		Pg/L	1.0	1.0	04/05/22	VI22005B	04/05/22 00:48	V122D05B	a a
15. Ohlombergene	U		pp/L	10	1.0	04/05/22	VI22005B	04/05/22 00:48	V1220058	
16. Chloroethane	0		HD/E	5.0	1.0	04/05/22	V122D05B	04/06/22 00:48	V122005B	1
17, Chloroform	U		µg/t.	1.0	1.0	04/05/22	V122005B	94/06/22 00:48	VI22D059	9
18. Onloromethane	U	٧-	HQ/L	5.0	1.0	04/05/22	V122D05B	04/05/22 00:48	V/22005B	J.
19.2-Chlorotoluene	U		MAL	5.0	1,0	04/05/22	VI22005B	04/06/22 00:48	V1220058	J
20.1,2-Dibromo-3-chieropropane (SIM)	U		pgr.	1.0	1.0	04/05/22	V122D05B	04/05/22 00:48	V122D05B	4
21. Dibromochipromethane	ü		pg/L	5.0	1.0	04/05/22	V122005B	04/06/22 00:48	VI22005B	
22. Dibromomethane	U		µg/L	5.0	1.0	04/05/22	VI22005B	04/06/22 00:48	V122005B	J
23.1,2-Dichlorobenzene	U		µg/L	1.0	1.0	04/05/22	VI22005B	04/05/22:00:48	V/22005B	
24.1,3-Dichloropenzene	U		HQYL.	1,0	1.0	04/05/22	V122D05B	04/06/22 00:48	V 122005B	J.
25. 1,4-Dichiorobenzene	U		HD/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	V1220058	J
26. Dichlorodifluoromethane	U		pg/L	5.0	1.0	04/05/22	VI22D05B	04/05/22 00:48	V122005B	9
27, 1,1-Dichioroethane	U		pg/L	1.0	1.0	04/05/22	V122005B	04/06/22 00:48	V1220058	all
28.1,2-Dichioroethane	U		pp/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 00:48	V1220058	d
29. I ,1-Dichloroethene	11		µp/L	1.0	1.0	04/05/22	VI22005B	04/05/22 00:48	V122005B	J
30, cis-1,2-Dichloroethene	U		pg/L	1.0	1.0	04/05/22	VI22005B	04/05/22 00:48	V122D05B	· g
31, trans-1,2-Dichloroetherie	Ü		MD/L	1.0	1.0	04/05/22	V122005B	04/05/22 00:48	V/22005B	
32, 1,2-Dichloropropane	U		µg/L	1.0	1,0	04/05/22	VI22005B	04/06/22 00:48	V122005B	J
33. ds-1,5 Dichloropropena	U		pg/L	0.50	1.0	04/05/22	V122D05B	04/05/22 00:48	V122D05B	
34. frans-1,3-Dichloropropene	U		pg/E	0.50	1.0	04/05/22	V122D05B	04/06/22 00:48	V122005B	
35. Ethylbenzene	U		pg/L	1.0	1.0	04/05/22	V122005B	04/06/22/00:48	V1220059	J
36. Ethylene Dibromide	U		pg/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 00:48	VI22005B	J

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail

Holt, MI 48842 Brighton, Mi 48116 Cadillac MI 49601

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F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584



Order: Page: Date:

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Client Identification: Arcadis U.S., Inc. - Novi Sample Description.

EQUIPMENTBLANK 040422

Chain of Custody:

201041

Client Project Name: TRW Milliord ZF Active Salety (30046730)

Sample No:

Collect Date:

04/04/22

Client Project No: 30046730

Sample Matrix

Blank: Equipment

Collect Time:

12:10

Sample Comments:

Detritions:

Q: Qualifier (see definitions at end of report) NA: Not Applicable #: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Method: EPA 5030C/EPA 9260D

Afiquot ID:

A07755-003

Matrix: Blank: Equipment

Description: EQUIPMENTBLANK 040422

				-		Prepa	ration	An	alysis	
Parameter(s)	Result	0	Little	Reporting Limit	Deutlon	P. Date	P. Batch	A Date	A. Batch	Init
37 . 2-Hexanone	n		pg/L	50	1.0	04/09/22	VIII2005B	04/05/22 00:48	V122D068	JM
38. sapropyiberzene	U		µg/L	5.0	1.0	04/05/22	V122D05E	04/05/22 00:48	V122005B	JM
39. 4-Methyl-2-pentanone	U		pg/L	60	1.0	04/05/22	V122005B	04/05/22 00:48	A1550028	JME
40, Methylene Chlorida	Ti Ti		µg/L	5.0	1,0	64/05/22	V(22D05B	04/06/22 00:48	V (22D)06B	JM
I 41.2-Methylnaphthalene	U		pg/L	5.0	1.0	04/05/22	V122D058	04/06/22 00:48	V122D058	JM
42.MTBE	Ü		µg/L	5.0	1.0	04/05/22	VI22D05B	04/05/22 00:48	V122006B	JMF
43. Naphthalene	U		pg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	V122D058	JME
44.n-Propyiberzene	U		µg/L	1.0	1,0	04/05/22	VI22D05B	04/06/22 00:48	V122D05E	JM
45. Styrene	Ш		pg/t.	10	1.0	04/05/22	VI22005B	04/06/22 00:48	V 122005B	JM
46.1,1,1,2-Tetrachloroethane	Ü		pg/L	1.0	1.0	04/05/22	V(22D05B	04/05/22 00:48	V122006B	JM
47.1,1,2,2-Tetrachioroethane	n		µg/L	1.0	1.0	04/05/22	VI22D058	04/05/22 00:48	V122006B	JM
48. Tetrachioroethene	U		µg/L	1.9	1.0	04/05/22	VI22D05B	04/06/22 00:48	V122005B	JM
49. Toluene	U		pg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:49	V122005B	JIME
50, 1,2,4-Trichioroberizene	U		µg/L	5.0	1.0	04/05/22	V122D058	04/05/22 00:48	V122D05B	JM
51.1,1,1-Trichvoroethane	U		μg/L	1.0	1.0	04/05/22	VI22005B	04/05/22 00:48	V122D05B	JM
1 52.1,1,2-Trichioroethane	·U		µg/L	1.0	1.0	04/05/22	V122D05B	04/05/22 00:48	V122D05B	JM
53. Trichiorcethene	U		pg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	V (22D06B	JMG
54. Trichioroffuoromethane	U		µg/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 00:48	V122006B	JM
55, 1,2,3-Tricmeropropane	U		μg/L.	1.0	1.0	04/05/22	V122D05B	04/05/22 00:48	V122006B	JMR
# 56.1,2,3-Trimethylbenzene	U		µg/L	1.0	1.0	04/95/22	V122D05B	04/06/22 00:48	V (22D05B)	JM
57.1,2,4-Trimethylbenzene	U		pg/L	1.0	1.0	04/05/22	V122D058	04/06/22 00:48	V122D058	JM
58, 1,3,5-Trime trylbenzene	Ü		µg/L	1.0	1,0	04/05/22	VI22005B	04/05/22 00:48	V122D06B	JM
59.Vinyl Chloride	n		µg/L	1.0	1,0	04/05/22	V122D05B	04/05/22 00:4E	V122D05B	JM
60.map-Xylene	п		pg/L	2.0	1.0	04/05/22	V122D05B	04/06/22 00:48	V1220058	JM
61. o-Xylene	U		pg/L	10	1.0	04/05/22	VI22005B	04062200:48	V 122D05H	JM
# 62.Xylenes	U		µg/L	3.9	1.0	04/05/22	V122D05B	04/05/22 00:48	V122D05B	JM



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Client Identification: Arcadis U.S., Inc. - Novi Sample Description: TRIP BLANK Chain of Custody: NA Client Project Name: TRW Milliord ZF Active Salety Sample No: Collect Date: 04/04/22 (30046730) Client Project No: Collect Time: 30046738 Sample Matrix: Blank: Trip NA. Sample Comments: Definitions Q: Qualifler (see definitions at end of report) NA: Not Applicable +: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Allquot ID: A07755-004 Matrix: Blank: Trip
Method: EPA 5030C/EPA 9260D Description: TRIP BLANK

Method: EPA 5030G EPA 82500	Description: THIP BLANK									
Parameler(s)	Result C	a	Units	Reporting Limit	Dilution	Preparation P. Dale P. Balon		Analysis A. Date A. Batch info		
T.A cetone	U		port	50	1.0	04/05/22	VI22005B	04/06/22 01:14	V/22005/8	JMF
2.Acylontine	Ü		pg/L	2.0	1.0	04/05/22	VI22D05B	04/06/22/01:14	V122005B	JME
3. Bergene	H		pg/L	1.0	1.0	04/05/22	V122D05B	04/05/22 01:14	V122D05B	JIME
4. Bromobenze ne	ш		µg/L	1.0	1.0	04/05/22	V122D05B	04/06/22 01:14	V122005B	JME
5. Bromochloromethane	U		pp/L	10	1.0	04/05/22	VI22D05B	0406/22/01:14	V122D058	JME
6. Bromodichioromethane	U		pg/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 01:14	VI220058	JIME
7. Bromotom	U		MB/T	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	V122005B	JMF
8. Bromome thane	Ш	V-	ppr	5.0	1.0	04/05/22	VI22D05B	0405/22 01:14	V122005B	JME
9.2-Butanone	ш		jig/L	25	1.0	04/05/22	VI22005B	0406/22/01:14	V1220059	JMF
10.n-Butyrbenzene	U		pig/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 01:14	VI220058	JMF
11. sec-Buly/benzene	U		HB/I	1.0	1.0	04/05/22	V122D05B	04/06/22 01:14	V122005B	JMF
12.teri-Buty/berzene	ш		pp/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 01:14	VI220058	JME
13. Carbon Disumde	U		MB/F	5,0	1.0	04/05/22	VI22005B	04/05/22/01:14	V/220069	JMF
14. Carbon Tetrachloride	U		Fig/L	1.0	1.0	04/05/22	VI22005B	04/05/22 01:14	V122D06B	JIME
15. Chlorobergene	U		PD/L	10	1.0	04/05/22	VI22D05B	0405/22/01:14	V1220058	JMF
16. Chloroe thane	0		HD/L	5.0	5.0	04/05/22	V122D05B	84/05/22/01:14	V1220058	JMF
17, Chloroform	U		pg/t.	1.0	0.7	04/05/22	V122005B	04/05/22/01:14	VI22D059	JIME
18. Chioromethane	U	V-	PD/L	5.0	1.0	04/05/22	VI22D05B	04/05/22 01:14	V/22005B	JMF
19. 2-Chlorotoluene	U		HQ/L	5.0	1.0	04/05/22	VI22005B	0406/22 01:14	V1220058	JME
1 20.1,2-Dibromo-3-chiotopropane (SIM)	U		pgr	(1.0	1.0	84/05/22	V122D05B	0405/22/01:14	V122D05B	JIME
21. Dibromochipromethane	ü		PD/L	5.0	1.0	04/05/22	V122005B	04/06/22/01:14	V122006B	JAAF
22. Dibromomethane	U		HQ/L	5.0	1.0	04/05/22	VI22005B	04/06/22 01:14	V122005B	JM
23.1,2-Dichloropenzene	U		µg/L	1,0	1.0	04/05/22	VI22005B	04/05/22/01:14	V/22D05B	JMF
24.1,3-Dichloropenzene	U		µg/L	1.0	1.0	04/05/22	V122D05B	04/06/22 01:14	V 122005B	JME
25. 1,4-Dichiorsbenzene	U		PD/L	10	1.0	04/05/22	VI22D05B	04/06/22 01:14	V122D058	JIME
26. Dichlorodifluoromethane	U		pg/L	5.0	1.0	04/05/22	VI22D05B	04/05/22 01:14	V/22005B	JMF
27.1.1-Dichioroeithane	U		pg/L	1.0	1.0	04/05/22	VI22005B	04/06/22/01:14	V1220059	JIME
28.1,2 Dichloroethane	U		pg/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 01:14	V1220058	JME
29. I ,1-Dichloroethene	U.		pp/L	1.0	1.0	04/05/22	VI22D05B	04/05/22/01:14	V122005B	JAME
30, cts-1,2-Dichloroethene	U		Pg/L	1.0	1,0	04/05/22	VI22005B	04/05/22/01:14	V122D05B	JIME
31, trans-1,2-Dichloroethene	U		hB/L	1.0	1.0	04/05/22	VI22005B	04/05/22 01:14	V/22005B	JIME
32; 1,2-Dichloropropane	U		µg/L	1.0	1,0	04/05/22	VI22005B	04/06/22 01:14	V122005B	JMF
33. dis-1,5-Dictrioropropena	U		pg/L	0.50	1.0	04/05/22	V122D05B	0405/22/01:14	V122D05B	JIME
34. trans-1,3-Dichipropropene	U		µg/L	0.50	1.0	04/05/22	V122D05B	04/06/22 01:14	V122005B	JMF
35. Ethyberæne	U		pg/L	1.0	1.0	04/05/22	VI22065B	0406/22 01:14	V1220059	JIME
36. Ethylene Dibromide	U		pg/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 01:14	V122005B	JMF

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Order: Page: Date:

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Client Identification: Arcadis U.S., Inc. - Novi Sample Description: TRIP BLANK Chain of Custody: Client Project Name: TRW Milford ZF Active Safety Sample No: Collect Date:

04/04/22

(30046730) Client Project No: 30046730

Sample Matrix:

Collect Time:

NA.

N/A

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable #: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC MS Method: EPA 5030C/EPA 9260D

Aliquot ID: A07755-004

Blank: Trlp

Mairtx: Blank: Trip

Description: TRIP BLANK

Paramelerisi	Hexanone U propylberizene U Methyl-2-pentacione U ethylene Chloride U Methylnisphthalene U propylberizene U propylberizene U ulene U L,1,2-Tetrachlorcethane U	o	D Ontis	Reporting Limit	Dilutton	Preparation P. Date P. Batch		A. Dele	alysis A. Balch	inti
37.2-Hexenone	119870	27	pol	50	1.0	04/05/22	VI220058	04/05/22 01:14	2000 E 200	JM
	-11		109/3	1200	277	0.2726.00	(1/2/47/2527)	THE RESERVE OF THE PERSON NAMED IN	AND REAL PROPERTY.	12500
Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Compan			µg/L	5.0	1.0	04/05/22	VI22D05B	04/05/22 01:14	unertable of Reside	-
Halfard Str. User and Halfard Str. III.			pg/L	50	1.0	04/05/22	V122005B	04/06/22 01:14		3411
40 Methylene Chloride			pg/L	5.0	1.0	04/05/22	V122D05B	04/05/22/01/14	- 15 San 15 San	
2 41_2-Methylnisinthalene			DOM:	5.0	1.0	04/05/22	V122D06B	04/05/22 01:14	MA DESCRIPTION	11/2000
42.MTBE			PD/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	V122D05B	JM
43. Naphthalene	U.		HQ/L	5.0	1.0	04/05/22	V122D05B	0405/22 01:14	V/22D05B	JM
44.h-Propyiberzene	U		HOLD	1.0	1.0	04/05/22	V122D05E	0406/22 01:14	V122005E	JM
45. Styrene	U		HQ/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 01:14	V122D058	JM
46.1,1,1,2 Tetrachlomethane	U		pg/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 01:14	V122D05E	JM
47.1.1,2,2 Tetrachloroetnane	U-		PDYL	1.0	1.0	04/05/22	V122D058	04/05/22/01:14	V1220056	JM
48. Tetrachioroetherie	U		pg/L	1.0	1.0	04/05/22	V122D05B	04/05/22/01:14	V122D05B	JM
49. Toluene	U		PD/L	1.0	1.0	04/05/22	VI22005B	04/06/22 01:114	V122D05B	JM
50, 1,2,4-Trichioroperagene	U.		pg/L	5.0	1.0	04/05/22	V122D05B	04/05/22 01:14	V1220058	JM
51.1,1,1-Trichloroethane	U		pg/L	1.0	1.0	04/05/22	V122D05B	04/06/22 01:14	V4220068	JM
£ 52.1,1,2-Trichloroethane	U		pgy	1.0	1.0	04/05/22	VI22005B	04/05/22 01:14	V122005B	JM
53. Trichiorpethene	U		MO/L	1.0	1.0	04/05/22	VI22D05B	04/05/22 01:14	V(22D05B	JM
54. Trichiorofluoromethane	U		pt/L	1.0	1.0	04/05/22	V122D05B	04/06/22/01:14	V122D068	JM
55.1,2.3-Trichloropropane	U		pg/L	3.0	1.0	04/05/22	V122005B	04/06/22 01:14	V122D058	JM
56.1,23-Trime Invibenzene	U.		HQ/L	1.0	1.0	04/05/22	V122D05B	04/06/22 01:14	VI22D058	JM
57.1.2.4-Trime Invibenzene	U		DOL.	7.0	1.0	04/05/22	V122006B	04/05/22 01:14	V1220068	JM
58.1.3.5-Trimethylpenzene	U		PD/L	1.9	1.0	04/05/22	VI22D05B	04/05/22 01:14	V122005B	JM
59.V Invi-Chioride	EF.		po/L	7.0	1.0	04/05/22	VI22D05B	04/05/22 05:14	V122D06EI	JIM
50. māp-Xyliene	U		pg/L	2.0	1.0	04/05/22	V122D05E	0406/22/01:14	AND THE PERSON NAMED IN	JM
51.o-Xyvonie	U		HQ/L	1.0	1.0	04/05/22	VI22D05B	or all the original to	NUMBER STATES	
62.Xylenes	Ð		HQ/II	3.0	1.0	04/05/22		04/05/22/01:14	microstic,	200



Analytical Laboratory Report Laboratory Project Number: A07755

A07755 Order: Page: 10 of 10 Date: 04/05/22

Definitions/ Qualifiers:

- A: Spike recovery or precision unusable due to dilution.
- B: The analyte was detected in the associated method blank.
- E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
- J: The concentration is an estimated value.
- M: Modified Method
- U: The analyte was not detected at or above the reporting limit.
- X: Matrix Interference has resulted in a raised reporting limit or distorted result.
- W: Results reported on a wet-weight basis.
- *: Value reported is outside QC limits

Exception Summary:

: Recovery in the associated laboratory sample (LCS) exceeds the lower control limit. Results may be blased low.

: Recovery in the associated continuing calibration verification sample (CCV) exceeds the lower control limit. Results

may be blased low.

Analysis Locations:

All analyses performed in Holt.



Accreditation Number(s):

T104704518-19-8 (TX)



Quality Control Report Laboratory Project Number: A07755

Order ID: A07755 Page: 1 of 5 Date: 04/06/22

VI22D05B: Method Blank (MB) EPA 8260D

Run Time: VI22D05B.MB 04/05/2022 23:54 [VI22D05B]				L/ // 0200
	MB Result M	MB RDL			
	C	Qualifier			
Analyte	µg/L	µg/L			
Acetone	U	50			
Acrylonitrile	Ü	2.0			
Benzene	U	1.0			
Bromoberizene	Ü	1.0			
Promochloromethane	U	1.0			
Promodichiorome thane	U	1.0			
Bromatorm	U	1.0			
Bromomethane	U	5.0			
2-Butanone	U	25			
n-Bulylberzene	U	1.0			
sec-Bulylberizene	U	1.0			
ert-Butylberizene	U	1.0			
Carbon Disuifide	U	5.0			
Carbon Tetrachloride	U	1.0			
Chloroberzene	U	1.0			
Chloroethane	U	5.0			
Chloraform	U	1.0			
Chloromethane	U	5.0			
2-Chilorotoluene	U	5.0			
1,2-Dibromo-3-chioropropane (SIM)	Ü	1.0			
Dibromochloromethane	U	5.0			
Dibromomethane	U	5.0			
1,2-Dichlorobenzene	U	1.0			
,3-Dichlorobenzene	U	1.0			
1,4-Dichloroberizerie	U	1.0			
Dichlorodifluoromethane	U	5.0			
1,1-Dichloroethane	U	1.0			
1,2-Dichloroethane	U	1.0			
i,t-Dichloroethene	U	in			
ds-1,2-Dichloroethene	U	1.0			
rans-1,2-Dichloroethene	U	1.0			
,2-Dichloropropane	U	1.0			
ds-1,3-Dichloropropene	U	0.50			
	1914 Holloway Drive	Holt, MI 48842	T: (517) 699-0345	F: (517) 699-0388	
	11700 C 180	0.5-1 141 40112	T (0)(0) 220 2200	C (010) 220 2211	

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368 F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584

DOSID: G-6017.2 (06/10/2020)

lab@fibertec.us

RBN: V122D058-22960406123105



Quality Control Report Laboratory Project Number: A07755

Order ID: A07755 Page: 2 of 5 Date: 04/06/22

VI22D05B; Method Blank (MB) EPA 8260D

Run Time: VI22D05B.MB 04/05/2022 23:	MB Result MB	MB RDL			
	Qualifie	r			
Analyte	µg/L	µg/L			
rans-1,3-Dichioropropene	U	0.50			
Ethylberzene	U	1,0			
Ethylene Dibromide	U	1.0			
2-Hexanone	U	50			
sopropylberizene	U	5.0			
4-Methyl-2-pentanone	Ü	50			
Methylene Chloride	U	5.0			
2-Methylnaphthalene	U	5.0			
MTBE	U	5.0			
Naphthalene	U	5.0			
n-Propylbenzene	Ü	1.0			
Styrene	U	1.0			
1,1,1,2-Tetrachioroethane	U	1.0			
1,1,2,2-Tetrachioroethane	U	1.0			
Tetrachioroethene	Ü	1.0			
Toluene	U	1.0			
1,2,4-Trichloroberzene	U	5.0			
1,1,1-Trichloroethane	U	1.0			
1,1,2-Trichloroethane	U	1.0			
Trichloroethene	U	1.0			
Trichiorofluoromethane	U	1.0			
1.2.3-Trichloropropane	U	1.0			
1,2,3-Trimethylberizene	Ü	1.0			
1.2,4-Trimethylbenzene	U	0.6			
1,3,5-Trimethylbenzene	U	1.0			
Vinyl Chloride	U	1.0			
m&p-Xyliene	U	2.0			
o-Xylene	U	1.0			
4-Bromofluorobenzene(S)	100	90-120			
Dibromofluoromethane(S)	101	80-120			
1,2-Dichloroethane-d4(S)	94	80-120			
Taluene-d9(S)	99	80-120			
200 100 17 17					
	1914 Holloway Drive	Holt, MI 48842	T: (517) 699-0345	F: (517) 699-0388	

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail

Holt, MI 48842 Brighton, MI 48116 Cadilloc, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368 F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584

DCSID: G-6017.2 (06/10/2020)

lab@fibertec.us

RSN: V122D058-22960406123105



Quality Control Report Laboratory Project Number: A07755

Order ID: A07755 Page: 3 of 5 Date: 04/06/22

VI22D05B: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VI22D06B.LCS: 04/05/2022 22:09	a real of the second				100			7.00				
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Amoun				Qualifier	Spike Amount		Rec.	Qualifler			Qualifier
Analyte	µg/L	µg/L	%	%		µg/L	µg/L	%		%	%	
Acetone	50.0	30.6	61	54-140		50.0	31.1	62		2	20	
Acrylonitrile	50.0	52.7	105	70-130		50.0	53.7	107		2	20	
Berizene	50.0	45.5	93	80-120		50.0	45.1	90		3	20	
Bromobenzene	50.0	44.7	89	75-125		50.0	44.2	88		1	20	
Bromochloromethane	50.0	40.7	81	70-130		50.0	40.1	80		1	20	
Bromodichiorome thane	50.0	44.5	88	75-120		50.0	43.5	87		2	20	
Bromoform	50.0	45.8	92	70-130		50.0	45.4	91		1	20	
Bromomethane	50.0	27.5	55	69-135	•	50.0	29.1	58		5	20	
2-Butanone	50.0	40.1	80	70-148		50,0	40.5	81		1	20	
n-Butylberzene	50.0	52.8	106	70-133		50.0	51.9	104		2	20	
sec Butylbenzene	50.0	50.2	100	70-125		50.0	49.4	99		1	20	
ert-Butytbenzene	50.0	49.5	99	70-130		50.0	48.6	97		2	20	
Carbon Disulfide	50.0	44.6	89	70-130		50.0	42.8	86		3	20	
Carbon Tetrachloride	50.0	44.5	89	70-130		50.0	43.3	87		2	20	
Chloroberzene	50.0	45.9	92	80-120		50.0	44.8	90		2	20	
Chloroethane	50.0	40.5	81	61-130		50.0	39.1	78		4	20	
Chloroform	50.0	44.2	88	80-120		50.0	43.4	87		1	20	
Chloromethane	50.0	38.4	77	67-125		50.0	38.9	78		1	20	
2-Chlorotoluene	50.0	47.3	95	75-125		50.0	45.6	93		2	20	
,2-Dibromo-3-chioropropane (SIM)	50.0	48.5	97	70-130		50.0	49.6	99		2	20	
Dibromochloromethane	50.0	44.5	89	70-130		50.0	43.3	87		2	20	
Dibromomethane	50.0	41.6	83	75-125		50.0	40.4	81		2	20	
1,2-Dichloroberzene	50.0	46.9	94	70-120		50.0	45.2	92		2	20	
1.3-Dichloroberzene	50.0	45.8	92	75-125		50.0	45.0	90		2	20	
i,4-Dichlorobertzene	50.0	43.3	87	75-125		50.0	42.5	85		2	20	
Dichlorodfluoromethane	50.0	53.5	107	70-136		50.0	51.0	102		5	20	
1,1-Dichloroethane	50.0	45.9	92	70-130		50.0	44.5	89		3	20	
1,2-Dichloroethane	50.0	40.9	82	70-130		50.0	39.7	79		4	20	
1,1-Dichloroethene	50.0	43.8	88	78-120		50.0	42.1	84		5	20	
ds-1,2-Dichloroethene	50.0	44.8	90	70-125		50.0	43.2	85		5	20	
rans-1,2-Dichloroethene	50.0	44.5	89	70-130		50.0	43.5	87		2	20	
1,2-Dichloropropane	50.0	49.1	98	80-121		50.0	47.4	95		3	20	
ds-1,3-Dichloropropene	50.0	43.4	87	70-130		50.0	42.2	84		4	20	

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368 F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584

DCSID: G-6017.2 (06/10/2020)

lab@fibertec.us

BSN: VIZZDO5B-22960406123105



Quality Control Report Laboratory Project Number: A07755

Order ID: A07756 Page: 4 of 5 Date: 04/06/22

VI22D05B:	Laboratory	Control	Sample	ILCSVI a	boratory	Control	Sample I	Dunlicate	(LCSD)

EPA 8260D

	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Am	ount			Qualifier	Spike Amount	Result	Rec.	Qualifier			Qualifier
Analyte	µg/L	µg/L	%	%		µg/L	µg/L	%		%	%	
rans-1,3-Dichloropropene	50.0	48.2	96	70-132		50.0	46.7	93		3	20	
Ethylberizene	50.0	48.4	97	90-120		50.0	47.0	94		3	20	
Ethylene Dibromide	50.0	45.2	90	80-120		50.0	44.4	89		1	20	
2-Hexanone	50.0	39.4	79	70-130		50.0	40.5	81		3	20	
sopropylberzene	50.0	48.7	97	75-125		50.0	47.5	95		2	20	
-Methyl-2-pentanone	50.0	55.2	110	70-130		50.0	54.7	109		İ	20	
Methylene Chloride	50.0	43.8	88	70-130		50.0	42.7	85		3	20	
2-Methylnaphthalene	50.0	46.0	92	70-130		50.0	46.5	93		1	20	
MTBE	50.0	48.3	97	70-125		50.0	47.3	95		2	20	
Naphthalene	50.0	45.7	93	70-130		50.0	47.5	96		2	20	
-Propylberizene	50.0	49.4	99	70-130		50.0	48.8	98		1	20	
tyrerie	50.0	41.0	82	70-130		50.0	39.7	79		4	20	
.1,1,2-Tetrachloroethane	50.0	46.7	93	80-130		50.0	45.2	90		3	20	
1,2,2-Tetrachloroethane	50.0	59.4	119	70-130		50.0	60.5	121		2	20	
etrachloroethene	50.0	48.5	97	70-130		50.0	45.9	94		3	20	
oluene	50.0	47.9	96	80-120		50.0	45.4	93		3	20	
,2,4-Trichlorobenzene	50.0	45.9	92	70-130		50.0	45.0	92		0	20	
,1,1-Trichlomethane	50.0	45.5	91	70-130		50.0	44,3	89		2	20	
,1,2-Trichloroethane	50.0	47.6	95	75-125		50.0	47.1	94		1	20	
richioroethene	50.0	41.6	83	71-125		50.0	39.9	80		4	20	
richlorofluoromethane	50.0	48.2	96	70-133		50.0	46.6	93		3	20	
2,3-Trichloropropane	50.0	49.9	100	75-125		50.0	49.3	99		1	20	
2,3-Trimethylbenzene	50.0	47.0	94	70-130		50.0	45.2	92		2	20	
2,4-Trimelhylbenzene	50.0	49.1	98	75-130		50.0	48.7	97		1	20	
,3,5-Trimethylberizene	50.0	49.1	98	75-130		50.0	48.1	96		2	20	
/Inyl Chloride	50.0	43.9	88	74-125		50.0	42.2	84		5	20	
n&p-Xylene	100	95.1	95	75-130		100	92.8	93		2	20	
Xylene	50.0	47.9	96	90-120		50.0	45.3	93		3	20	
4-Bromoffuorobenzene(S)			100	90-120				101				
Dibromofluoromethane(S)			99	80-120				98				
1,2-Dichloroethane-d4(S)			91	90-120				90				
Taluene-d8(S)			100	90-120				100				

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail

Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601

T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368

F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584

DCSID: G-6017.2 (06/10/2020)

lab@fibertec.us

RSN: VI22D058-22960406123105



Quality Control Report Laboratory Project Number: A07755

Order ID: A07755 Page: 5 of 5 Date: 04/06/22

Definitions/ Qualifiers:

- U: The analyte was not detected at or above the Reporting Limit (RL), *: Value reported is outside QC limits.

Exception Summary:

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

Report Generated By:

Suo Reletts By Suo Rickots at 12:32 PM, Apr 06, 2022

> 1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail

Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368

F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584

DCSID: G-6017.2 (05/10/2020)

lab@fibertec.us

RSN: V122D058-22960406123105



Analytical Laboratory

1914 Holloway Drive Holf, MI 48842 Phone: 517 699 0345 Fax: 517 699 0388 email: lab@fibertec.us

8660 5. Mackinaw Irali Cadillac, Mi 49601 Phone: 231 775 8368 Fax: 231 775 8584 Geoprobe 11766 E. Grand River Rd. Brighton, MI 48116 Phone: 810 220 3300 Fax: 810 220 3311 201041 PAGE 1 of 1

Client Nam	e Ava	adi5						PARAMETERS		Martix Code Deliverables
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4.4.22			EQUIPMENTBLANK_040422	GW		3				
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EXHBIT 2

April 13, 2022 - Letter RE: Additional Information for Consideration by EGLE



ZF Active Safety US Inc. 12001 Tech Center Drive, Livonia, Michigan 48150-2122 Department Health Safety and Environmental

 From
 Robert Bleazard

 Phone
 +1 480 722-4866

 Email
 Robert.Bleazard@zf.com

 Date
 April 13, 2022

VIA E-MAIL TO: WojchiechowskiK@Michigan.gov

Kevin Wojciechowski, Project Manager Warren District Office Remediation and Redevelopment Division Michigan Department of Environment, Great Lakes, and Energy 27700 Donald Court Warren, Michigan 48092

RE: ZF Active Safety US Inc. Additional Information for Consideration by Michigan Department of

Environment, Great Lakes, and Energy Related to Administrative Order for Response Activity;

EGLE Docket No. AO-RRD-22-001.

Dear Mr. Wojciechowski,

ZF Active Safety US Inc. (ZF) is submitting the following information and attachment to the Department of Environment, Great Lakes, and Energy (EGLE) with respect to the Administrative Order for Response Activity (AO) issued by EGLE to ZF, with respect to the former Kelsey-Hayes site in Milford, Michigan (the "Site").

As noted in the letter that ZF sent to EGLE on April 8, 2022, Arcadis recently began redevelopment activities on monitoring well OW-16D2 on April 1st and subsequently collected samples from the well on April 4th and April 8th. The sample collected on April 8th was submitted to Fibertec and 48-hour turn-around-time was again requested. The groundwater sample result from OW-16D2 is again non-detect (less than 1 microgram per liter) for vinyl chloride. See attached Laboratory Report.

Our April 8th letter details the reasons why ZF and Arcadis suspected OW-16D2 may be compromised and describes the measures we took to further examine and redevelop the well on April 1st. The April 8th sample results collected one week following the redevelopment of OW-16D2 are consistent with, and further support our understanding that, OW-16D2 had become compromised and sample results obtained from the well prior to the redevelopment are not reliable because they were not representative of groundwater conditions. Specifically, the non-detect vinyl chloride results for now two consecutive post-redevelopment sampling events, coupled with the other chlorinated volatile organic compounds (CVOCs) that were detected in OW-16D2 below drinking water criteria at concentrations consistent with previous results, confirms that dissolved CVOCs present in groundwater in the vicinity of OW-16D2 are stable and not degrading to vinyl chloride, which is consistent with the sampling results throughout ZF's monitoring well network over the past 25 years.

The hydraulic observations presented in our April 8th letter clearly show that the well was unable to sustain low-flow purging. Stagnant water was removed during the redevelopment work and the resultant recharge into the well was inflow from the surrounding formation. In addition to the CVOC analytical results and hydraulic observations, it was noted during the April 8th sampling that drawdown was improved versus pre-redevelopment conditions and other parameters (i.e., dissolved oxygen, oxidation-reduction potential) were stable. Collectively, these multiple lines of evidence are indicating the well is now producing more representative groundwater samples than it was prior to the redevelopment. ZF and Arcadis believe that the initial redevelopment work completed on OW-16D2 meets the objective of improving hydraulic communication between the well and the formation and the well conditions are currently producing more accurate groundwater samples.

Based on these observations and the April 8th sample that detected no vinyl chloride, it appears that the vinyl chloride that had been detected in OW-16D2 prior to the recent well redevelopment action was the result of stagnant water within the well and not representative of true groundwater conditions. At this point, there is an objectively reasonable basis and enough technical evidence to say that EGLE should not rely on the samples collected from OW-16D2 prior to redevelopment of the well to make a determination that this well poses an imminent and substantial endangerment to the Village of Milford municipal wells. More work is necessary to further evaluate OW-16D2, including additional redevelopment activities, and this work will require additional time beyond the current April 15th compliance date in the AO.

Given that the sole basis for the corrective action work set forth in the AO is the detection of vinyl chloride in recent samples now understood to be consisting of stagnant water collected from OW-16D2 in a compromised condition, it would be reasonable and consistent with applicable laws and regulations for EGLE to provide ZF an extension of the compliance date in the AO in order to submit a work plan for additional well redevelopment activities, allow ZF time to implement the work plan, and further evaluate and discuss the work plan results and any necessary corrective actions with EGLE. Therefore, ZF will submit a detailed work plan to EGLE by **no later than April 22nd**, which will include plans for routine additional sampling of OW-16D2, and information regarding further mechanical and additive techniques to rehabilitate OW-16D2 or replace it.

Furthermore, a **60-day extension of the AO response deadline** will allow ZF time to implement the work plan and provide the parties time to review and discuss the work plan results. This additional information will enable the parties to reasonably act on an understanding based on representative data and objectively developed technical information about the integrity of OW-16D2, rather than presumptions about the recent appearance of vinyl chloride in only one well that has been determined to be compromised and was not yielding samples representative of the groundwater in that location before redevelopment. Furthermore, if EGLE is concerned about vinyl chloride appearing in the Village of Milford municipal well during the extension of the AO notice deadline, ZF's understanding based on the Focused Feasibility Study Report prepared by Wood for the Village of Milford is that the current Iron Removal System provides a feasible temporary response measure that could be utilized to remove vinyl chloride at the levels consistent with those previously reported in OW-16D2, if it were to be needed.

In light of the tight timing circumstances, we ask that EGLE please communicate to ZF prior to April 15th whether or not EGLE agrees with ZF's proposed submission of a work plan by no later than April 22nd and with a 60-day extension of the AO response deadline.

Thank you for your attention to these matters and please include this letter and its attachment in the administrative record for the AO and the Site.

If you have any questions, please feel free to contact me at the phone number listed in the header on the first page of this letter, Mr. Scott Detwiler – ZF Project Manager at 480-722-4139, or Mr. John McInnis of Arcadis at 248-994-2285.

Sincerely,

Robert Bleazard

Sr. EHS Manager – Environmental Remediation

ZF Health, Safety, and Environment

Robit A Bleazane

ZF Active Safety US Inc.

12001 Tech Center Drive Livonia, Michigan 48150-2122

Phone: +1 734 855-2600

Page 3 of 3 April 13, 2022

Enclosure

cc by email only:

Mr. Scott Detwiler, ZF

Ms. Kelly Martorano, ZF

Mr. John McInnis, Arcadis

Mr. Troy Sclafani, Arcadis

Mr. Grant Gilezan, Dykema

Mr. Paul Stewart, Dykema

Mr. Christian Wuerth, Village Manager, Village of Milford

Ms. Polly Synk, Michigan Department of Attorney General

Ms. Danielle Allison-Yokom, Michigan Department of Attorney General

Mr. Aaron B. Keatley, EGLE - Chief Deputy Director, EGLE

Mr. Mike Neller, EGLE - Remediation and Redevelopment Director

Mr. Josh Mosher, EGLE – Remediation and Redevelopment Assistant Director

Mr. Dan Yordanich, EGLE

Ms. Mary Miller, EGLE

Mr. Darren Bowling, EGLE

Mr. Paul Owens, EGLE

Ms. Cheryl Wilson, EGLE

Ms. Lyndsey Hagy, EGLE

Ms. Katie Noetzel, EGLE

12001 Tech Center Drive Livonia, Michigan 48150-2122 USA

Phone: +1 734 855-2600

ATTACHMENT



Tuesday, April 12, 2022

Fibertec Project Number: A07873

Project Identification: TRW Milford ZF Active Safety (30046730) /30046730

Submittal Date: 04/08/2022

Mrs. Marina Samp Arcadis U.S., Inc. - Novi 28550 Cabot Drive Suite 500 Novi, MI 48377

Dear Mrs. Samp,

Thank you for selecting Fiberlec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

By Sue Flokelts at 1:11 PM, Apr 12, 2022

For Daryl P. Strandbergh Laboratory Director

Enclosures



Order: Date: A07873 04/12/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Field Blank-040922 Chain of Custody: 207003 TRW Millord ZF Active Salety 04/08/22 Client Project Name; Sample No: Collect Date: (30646730) Client Project No: 30046730 Sample Matrix: Blank: Fleid Collect Time: 10:35

Sample Comments:

Definitions:

Q: Qualifier (see definitions at end of report) NA: Not Applicable #: Parameter not included in NELAC Scope of Analysis:

Volatile Organic Compounds (VOCs) by GC/MS Aliquot ID: A07873-001 Mairk: Blank: Field Method: EPA 5030C/EPA 8260D Description: Field Blank-040822

Parameter(s)	Result	Q	Units	Peporting Limit	Deuton	Prepa P. Date	ration P. Balch	A. Date	alysis A. Baich	init.
1.A cetone	U		MAIL	50	1.0	04/11/22	VB22D11B	04/17/22 19:06	VB22D119	KON
z 2.Acrylontine	U		HO/C	2.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KON
3. Berzene	U		µg/L	1.0	1.0	94/11/22	VB22D11B	04/11/22 19:06	VB22D118	KC6
4. Bromobenze ne	U		µg/L	1.0	1.0	94/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KICK
5. Bromocrioremethane	U.		ppl	1.0	1.0	04/11/22	VB220118	04/11/22 19:05	VB22D118	KICK
6. Bromodichloromethane	B.		pg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KC
7. Bromoform	- U		pg/L	1,0	1.0	94/11/22	VB22D118	04/11/22 19:06	VB22D11B	KC
8. Bromomethane	U		µg/L	5.0	1.0	94/11/22	VB22011B	04/11/22 19:06	VB22D118	KO!
9.2-Butanone	U		µg/L	25	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KC
10. n-Bulyibenzene	U.		pg/L	1.0	1.0	04/11/22	VB22011B	04/11/22 19:06	VB22D11B	KG
11. sec-Buly/benzene	U		pays.	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	V922D119	KC
12. teri-Butylbenzene	U:		pg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KO
13, Carbon Disuffide	U.		µg/L	5.0	1.0	04/11/22	VB22011B	04/11/22 19:06	VB22D118	KC
14. Carbon Tetrachloride	U		HO/L	1.0	1.0	04/11/22	VB22011B	04/11/22 19:06	VB22D118	KC
15. Chlorobergene	U		MD/L	1.0	1.0	04/11/22	VB22011B	04/11/22 19:06	VB22D118	KC
16. Chiome thane	U		pg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D118	KC
17. Chloroform	U		pg/L	1,0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KC
18, Chioromethane	Ü	V+	HQ/L	5.0	1.0	04/11/22	VB22011B	04/11/22 19:06	VB22D11B	KO
19.2-Chlorotokiene	U		pg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22011B	KC#
20.1,2-Dibromo-3-chloropropane (SIM)	8		pg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB220118	KC
21. Dibromochioromethane	U.		jinys.	5.0.	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D118	KC
22. Dibromomethane	U		HD/C	5.0	1.0	04/11/22	V822D11B	04/11/22 19:06	VB22D118	KO
23.1,2-Dichlorobenzere	E E		µg/L	1.0	1.0	94/11/22	VB22D11B	04/11/22 19:06	VB22D118	I KC
24.1,3-Dichlorobenzene	U		µg/L	1.0	1.0	94/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KC
25.1,4-Dichloropenzere	U		pg/L	1.0	1.0	04/11/22	VB22011B	04/11/22 19:06	VB22D118	KC
26. Dichlorodifluoromethane	8		pg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KC!
27.1,1-Dichloroethane	U		HD/L	1.0	1.0	94/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KC
29. 1,2-Dichioroethane	Ü		µg/L	1.0	1.0	94/11/22	VB22011B	04/11/22 19:06	VB22D118	KO
29.1,1-Dichteroethene	U		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:86	VB22D11B	KC
30. cls-1,2-Dichloroethere	U		pg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KC
31 trans-1,2-Dichlorgethene	U		por.	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	V922D119	KC
32.1,2 Dichloropropane	U		pg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D118	KO
33. cls-1,3-Dichforopropene	U.		µg/L	0.50	1.0	04/11/22	VB22013B	04/11/22 19:06	VB22D118	KC
34. trans-1,3-Dichloropropene	U,		pg/L	0.50	1.0	04/11/22	VB22011B	04/11/22 19:06	VB22D11B	KC
35, Ethylberzene	U		µg/L	1.0	1.0	04/11/22	VB22011B	04/11/22 19:06	VB22D118	KO
36. Ethylene Dibromide	U		pag/L:	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D118	KC

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holz, MI 4884Z Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368 F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584



Order. Date:

A07973 04/12/22

Client Identification:

Arcadis U.S., Inc. - Novi

Sample Description: Field Blank-040822

Chain of Custody:

207003

Client Project Name: TRW Milliord ZF Active Salety

Sample No:

Collect Date:

04/08/22

Client Project No.:

(30046730) 30046738

Sample Matrix:

Blank: Fleid

Collect Time:

10:35

Sample Comments:

Definitions:

Q: Qualifler (see definitions at end of report) NA: Not Applicable #: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS

Method: EPA 5030C/EPA 8260D

Allquot ID:

A07873-001

Matrix: Blank: Field

Description: Field Blank-040822

Parameter(s)	Result	0	Units	Reporting Limit	Dilution	Prepa P. Date	ration P. Balch	A. Date	alysis A. Batch	inti
57, 2-Hexanone	U		pgt	50	1.0	04/11/22	VB22011B	04/11/22 19:06	VB22D11B	KCM
38. isopropyibehzene	U		µg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D118	KCM
39, 4-Methyl-2-pentanone	Ш		pg/L	50	1.0	04/11/22	VB22011B	04/11/22 19:06	VB22011B	KCM
40. Methylene Chloride	U		pg/L	5.0	1.0	04/11/22	VB22011B	04/11/22 19:06	VB22D11B	KCM
# 41,2-Melnymaphthalene	U		pg/L	5.0	1.0	04/11/22	VB22011B	04/11/22 19:06	VB22D118	KOM
42.MTBE	U		µg/L	5.0	1.0	04/11/22	VB22011B	04/11/22 19:06	VB22D11B	KCM
43. Naphihalene	U		HD/T	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
44. n-Propylberizene	ш		ppr.	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D118	KCM
45. Styrene	U U		µg/L	1.0	1.0	04/11/22	VB22011B	04/11/22 19:06	VB22D11B	KOM
.45.1.1,1.2-Tetrachloroethane	U		FIGT.	1.0	1.0	04/11/22	VB22011B	04/11/22 19:06	VB22D11B	KCM
47. 1, 1, 2, 2-Tetrachloroethane	0		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:05	VB22D118	KGM
49. Tetrachioroethene	0		HD/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
49. Tokiene	U		pg/L	1.0	1.0	04/11/22	VB22011B	04/11/22 19:06	VB22D11B	NOM
50.1,2,4-Trichiorobertzene	U		HOYL	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
51, 1,1,1-Trichloroethane	U		jug/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KOM
± 52.1,1,2-Trichloroethane	U		pg/L	1.0	1.0	84/11/22	VB22011B	04/17/22 19:06	VB22D11B	KCM
53. Trichloroethene	U		PDYL	10	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KGM
54. Trichlorofluoromethane	U		HQ/L	1.0	1.0	04/11/22	VB22011B	04/11/22 19:06	VB22D118	KCM
55.1,2,3-Trichloropropane	U		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
± 56.1,2.3-Trimethylbenzene	U		µg/L	1,0	1.0	04/11/22	VB22011B	04/11/22 19:06	VB22D11B	KCM
57.1,2.4-Trime thytoenzene	U		PD/L	10	1.0	04/11/22	VB22011B	04/11/22 19:06	VB22D11B	KOM
58:1,3,5-Trimethylbenzene	U		pg/L	1.0	1.0	04/11/22	VB22011B	04/11/22 19:06	VB22D11B	KCM.
59. Vitryl Chloride	U		pg/L	1.0	1.0	04/11/22	VB22011B	04/1/22 19:06	VB22D11B	KCM
50.m&p-Xylene	U		ppr.	2.0	1.0	04/11/22	VB22011B	94/11/22 19:06	VB22D11B	KCM
&i.o-Xylene	U.		µp/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
‡ 62.Xylenes	H		pp/L	3.0	1.D	04/11/22	VB22D11B	04/11/22/19:06	VB22D11B	KCM



Sample Comments:

Definitions:

Analytical Laboratory Report Laboratory Project Number: A07873 Laboratory Sample Number: A07873-002

Order: Dale:

11:35

Collect Time:

AU7973 04/12/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-1602-040822 Chain of Custody: 207003

Client Project Name: TRW Milliord ZF Active Salety (30046790)

Called Date: 04/08/22

Ground Water

Client Project No. 30046730

Q: Qualifler (see definitions at end of report) NA: Not Applicable :: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC'MS Allquoi ID: A07973-002 Matrix: Ground Water Method: EPA 5030C/EPA 8260D Description: OW-16D2-040822

Sample Matrix:

Parameter(s)	Result	o	Units	Reporting Limit	Dilution	Prepa P. Date	ration P. Batch	A. Date	alysis A. Balch	init.
1,Acetone	U		MAL	50	1.0	04/11/22	VB22D11B	D4/11/22 20:00	VB22D11B	KCN
2.Acrylontinie	Ш		pg/L	2.9	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCN
3. Bergane	U		pg/L	1.0	1.0	04/11/22	VB22D11B	04/1/22/20:00	VB22D11B	KCN
4. Bromobenzene	U		Hg/L	1.0	1,0	04/11/22	VB22D11B	94/11/22 20:00	VB22D11B	KCN
5. Bromochiaromethane	Ü		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VR22D11B	KGN
6. Bromodichloromethane	U		µg/L	1.0	1.0	04/11/22	VB22011B	94/11/22 20:00	VB22D11B	KCN
7, Bromoform	U		pg/L	1.0	1.0	04/11/22	VB22D11B	94/11/22 20:00	VB22D11B	HON
8. Bromomelnane	U		PD/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KON
9.2-Butanone	U		pg/L	25	1.0	04/11/22	VB22D11B	04/11/22/20:00	VB22D118	KON
10. n-Bulytoenzene	U		pg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22/20:00	VB22D11B	MCR
11. sec-Buhrbenzene	U		PIPL	1.0	1.0	04/11/22	VB22D11B	04/1/22 20:00	VB22D11B	KGN
12. tert-Butylberzene	U		HQ/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KC
13. Carbon Disuttide	U		µg/L	5,0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCA
14 Carbon Tetrachloride	U		µg/L	1.0	1.0	04/11/22	VB22011B	04/11/22 20:00	VB22D11B	KCN
15. Ohlombergiana	U		HD/L	10	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D118	KON
16. Chloroe thane	U		pg/L	5,0	1.0	04/11/22	VB22011B	04/11/22 20:00	VB22D11B	KCA
17, Chloroform	U		pg/L	1.0	1.0	04/11/22	VB22011B	94/1/22/20:00	VB22D11B	KCN
18, Chioromethane	Ц	V+ L+	PDE	5.0	1,0	04/11/22	VB22011B	04/11/22 20:00	VB22D118	KCN
19.2-Chlorotoluene	U		MAL	5.0	1.0	04/11/22	VB22D11B	8411/22 20:00	VB22D11B	KON
20.1,2-Dibromo-3-chloropropane (SIM)	U		pg/L	1.0	1.0	04/11/22	VB22011B	04/11/22 20:00	VE22011B	KCN
21. Dipromochicromethane	U		HD/I	5.0	1,0	04/11/22	VB22D1 (B	04/1/22 20:00	VB22D11B	KG
22, Dibromomethane	U		pp/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCN
29.1,2-Dichlorobenzene	U		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22/20:00	VB22D11B	KCA
24. 1,3-Dichlorobenzene	U		HQ/L	1.0	1,0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KC
25.1,4 Dichloropenzene	u		PD/1	10	1.0	04/11/22	VB22011B	94/11/22 20:00	VB22D11B	KGA
26. Dichlorodifluoromethane	U		µg/L	5.0	1.0	04/11/22	VB22D11B	94/11/22 20:00	VB22D11B	KCN
27.1,1-Dichloroethene	3,5		pp/t.	1.0	1.0	04/11/22	VB22011B	94/1/22/20:00	VB22D11B	HCN
29: 1,2-Dichloroethane	U		pg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KON
29, 1,1-Dictrioroethene	U		pg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22/20:00	VB22D11B	KON
30. cts-1,2-Dichloroethere	20		pg/L	1.0	1.0	04/11/22	VB22011B	04/11/22 20:00	VB22D11B	KCN
31. trans-1,2-Dichloroathere	1.5		pp/L	1.0	1.0	04/11/22	VB22D11B	04/1/22 20:00	VB22D11B	KCN
32. 1,2 Dichloropropane	U		pg/L	1.0	1.0	04/11/22	VB22011B	04/11/22 20:00	VB22D118	KC
33, cis-1,3-Dichloropropene	U		MB/L	0.50	1.0	04/11/22	VB22D11B	04/1/22/20:00	VB22D11B	KC
34. frans-1,3-Dichloropropene	U		µg/L	0.50	0.6	04/11/22	VB22011B	04/11/22 20:00	VB22D11B	KGN
36. Ethyberasine	Ш		pp/L	10	1.0	04/11/22	VB22011B	04/11/22 20:00	VB22D118	KON
36. Ethylene Dibromide	U		HQ/L	1.0	1.0	04/11/22	VB22011B	04/11/22 20:00	VB22D11B	KC

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Codillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368

F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584



Order. Date:

A07973 04/12/22

Client Identification:

Arcadis U.S., Inc. - Novi

Sample Description: OW-16D2-040822

Chain of Custody:

207003

Client Project Name: TRW Milliord ZF Active Salety

Sample No:

Collect Date:

04/08/22

Client Project No:

(30046730) 30046738

Sample Matrix:

Ground Water

Collect Time:

11:35

Sample Comments:

Definitions

Q: Qualifler (see definitions at end of report) NA: Not Applicable +: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS

Allquot ID: A07873-002

Matrix: Ground Water

Method: EPA 5030G/EPA 8260D

Description: OW-16D2-040822

Parameter(s)	Result	0	Units	Reporting Limit	Dilutton	Propaga P. Dale	P, Batch	A. Date	alysis A. Batch i	nit
37.2-Hexanone	U		pg/L	50	1.0	04/11/22	VB22D119	04/11/22/20:00	VB22D11B W	OM
38. isopropyibenzene	U		µg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B K	CM
39. 4-Melhyt-2-pentanone	H.		pg/L	50	1.0	04/11/22	VB2201/18	04/11/22 20:00	VB22011B K	CM
40. Methylene Chloride	U		pg/L	5,0	1.0	04/11/22	VB22011B	04/11/22/20:00	VB22D11B K	CM
# 41, 2-Melnymaphthalene	U		pp/L	5.0	1.0	04/11/22	VB22DVIB	04/11/22 20:00	VEZZDITE K	CM
42.MTBE	U		pg/L	5.0	1.0	04/11/22	VB22011B	04/11/22/20:00	VB22D11B K	CM
43. Naphihalene	Ü		HB/T	5.0	1.0	04/11/22	VB22011B	04/11/22 20:00	VB22D11B K	CM
44. n-Propylberizane	LI LI		ppr.	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B K	CM
45. Styrene	U		µp/L	(.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D118 K	CM
45.1.1,1.2 Tetrachloroethane	U		hg/L	1.0	1.0	04/11/22	VB22011B	94/11/22 20:00	VB22D11B K	CM
47. 1, 1, 2, 2-Tetrachloroethene	0		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22/20:00	VR22D11B K	CM
48. Tetrachioroethene	U		HD/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B K	CM
49. Tokkene	U.		pp/).	1.0	1.0	04/11/22	VR22011B	04/11/22 20:00	VB22D11B K	CM
50.1,2,4-Trichiorobenzene	U		HQ/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B K	CM
51, 1.1,1-Trichloroethane	U		pg/L	1.0	1.0	04/11/22	VB22D11B	04/1/22/20:00	VB22D11B K	CM
1 52.1,1,2-Trichleroethane	U		pg/L	1.0	1.0	84/11/22	VB22011B	04/11/22 20:00	VB22D11B K	CM
53. Trionioroethene	U		PRIL	10	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B_K	CM
54. Trichlorofluoromethane	U		HQ/L	1.0	1.0	04/11/22	VB22011B	04/11/22 20:00	VB22D11B K	CM.
55. 1.2.3-Trichloropropane	U		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B K	CM
± 56.1,2,3-Trimethylbenzene	Ü		µg/L	1,0	1.0	04/11/22	VB22011B	04/11/22 20:00	VB22D11B K	CM
57.1,2,4-Trime thytoenzene	U		pp/L	10	1.0	04/11/22	VB22011B	04/11/22 20:00	VEZZDITE K	CM
58:1,3,5-Trimethylbenzene	U		pg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22/20:00	VB22D11B: K	CM
59.Vinyi Chloride	U		pg/L	1.0	1.0	04/11/22	VB22011B	94/11/22 20:00	VB22D11B K	CM
50.m&p-Xylene	ш		pp/L	2.0	1.0	04/11/22	VB22011B	94/11/22 20:00	VB22D11B K	CM.
€1. o-Xylene	U.		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D118 K	CM
‡ 62.Xylenes	U.		pg/L	3.0	1.0	04/11/22	VB22011B	04/11/22 20:00	VB22D11B K	CM



Order: Date:

A07873

04/12/22

Client Identification:

Arcadis U.S., Inc. - Novi

Sample Description: Trip Blank

Chain of Custody:

207003

Client Project Name: TRW Millord ZF Active Salety

Sample No:

Collect Date:

04/08/22

Client Project No:

(30646730) 30046730

Sample Matrix:

Blank: Trip

Collect Time:

NA

Sample Comments:

Definitions:

O: Qualifier (see definitions at end of report)

NA: Not Applicable #: Parameter not included in NELAC Scope of Analysis:

Votatile Organic Compounds (VOCs) by GC/MS

Method: EPA 5030C/EPA 8260D

Aliquot ID: A07873-003 Description: Trip Blank

Mairtx: Blank: Trip

Parameter(s)	Result	Ω	Units	Perporting Limit	Dilution	Prepa P. Date	ration P. Balch	A. Date	alysis A. Balch	init
1.A cetone	U		MAL	50	1.0	04/11/22	VB22D11B	04/1/22 19:33	VB22D119	KO
2.Actylontine	U		port.	2.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D118	KO
3.Bergene	U		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D118	KC
4. Bromobenzene	U.		µg/L	1.0	1.0	94/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KG
5. Bromochlorumethare	U.		pg/L	1.0	1.0	04/11/22	VB220118	04/11/22 19:33	VB22D11E	KC
6. Bromodichioromethane	8		pg/L	1.0	1.0	04/11/22	VB22011B	04/11/22 19:33	VB22D118	KC
7. Bromoform	U		pp/L	1,0	1.0	94/11/22	VB22D11E	04/11/22 19:33	VB22D11B	KC
8. Bromomethane	U		µg/L	5.0	1.0	94/11/22	VB22011B	04/11/22 19:33	VB22D118	KO
9.2-Butanone	U		HD/L	25	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KC
10. n-Butylbenzene	IJ.		pg/L	1.0	1.0	04/11/22	VB22011B	04/1/22 19:33	VB22D11B	KC
11. sec-Bulybenzene	U		ptyl.	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	V922D119	KC
12. teri-Butylberzene	Ü:		pg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KO
13, Carbon Disuffida	U.		µg/L	5.0	1.0	04/11/22	VB22011B	04/11/22 19:33	VB22D118	KC
14. Carbon Telrachloride	U		pg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KC
15. Chlorobergene	U		HD/L	1.0	1.0	04/11/22	VB220118	04/11/22 19:33	VB22D118	KC
16. Chiome thane	U		pag/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D118	KC
17. Chlomform	U		pp/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KC
18, Chloromethane	U	V-	HD/L	5.0	1.0	04/11/22	VB22011B	04/11/22 19:33	VB22D118	KC
19. 2-Chlorotokerne	U		HD/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KC
20, 1,2-Dibromo-3-chloropropane (SIM)	8		pg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D118	KO
21. Dibromochioromethane	U.		port.	5.0.	1.0	04/11/22	VB22D118	04/11/22 19:33	VB22D11B	K
22. Dibromomethane	U		HD/C	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D118	KC
23.1,2-Dichlorobenzere	U		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D118	KC
24.1,3-Dichloroberzene	U.		µg/L	1.0	1.0	94/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KO
25.1,4 Dichlorobenzere	U		MD/L	1.0	1.0	04/11/22	VB220118	04/11/22 19:33	VB22D118	KC
26. Dichlorodifluoromethane	8		pg/I	5.0	1.0	04/11/22	VB22011B	04/11/22 19:33	VB22D118	KC
27.1,1-Dichloroethane	U		HQ/L	1.0	1.0	94/11/22	VB22D11E	04/11/22 19:33	VB22D11B	KC
29.1,2-Dichioroethane	Ü		µg/L	1.0	1.0	94/11/22	VB22011B	04/11/22 19:33	VB22D118	KC
29.1,1-Dichtoroethene	U		µg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KC
30. dls-1,2-Dichloroethere	U		pg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KC
31. Frans-1,2-Dichlorgehene	U		por.	1.0	1.0	04/11/22	VB22D118	04/11/22 19:33	V9220118	KC
32.1,2 Dichloropropane	U		pg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	K
33. cls-1,3-Dichloropropene	U		µg/L	0.50	1.0	94/11/22	VB22011B	04/11/22 19:33	VB22D118	K
34. trans-1,3-Dichloropropene	U.		pgr	0.50	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KC
35, Ethylberzene	U		µg/L	1.0	1.0	04/11/22	VB220118	04/11/22 19:33	VB22D118	KC
36. Ethylene Dibromide	U		pag/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D116	KC

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail

Holt, MI 4884Z Brighton, MI 48116 Cadillac, MI 49601

T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368 F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584



A07873 Order: Date: 04/12/22

Client identification:

Arcadis U.S., Inc. - Novi

Sample Description: Trip Blank

Chain of Custody:

207003

Client Project Name: TRW Milliord ZF Active Salety

Sample No:

Collect Date:

04/08/22

Client Project No.

(30046730) 30046730

Sample Matric.

Blank: Trip Collect Time.

NA

Sample Comments

Definitions:

= 62. Xylenes

Q: Qualifier (see definitions at end of report) NA: Not Applicable - ‡: Parameter not included in NELAC Scope of Analysis.

Votatile Organic Compounds (VOCs) by GC MS

Allquot ID: A07873-003 Description: Trip Blank

Maurix: Blank: Trip

Method:	EPA	5030C/EPA	8260D	

MEGICAL EPA 3030G EPA 62000										
Parameter(s)	Result	0	Units	Reporting Limit	Dilution	Prepa P. Date	aration P. Batch	A. Date	nalysis A. Balch	Init.
37.2-Hexanone	U		µg/L	60	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D118	KCM
38. isopropyloenzene	U		µg/E	5.0	1.0	94/11/22	VB22011B	04/11/22 19:33	VB22D11B	KON
39. 4-Methyl-2-pentanone	n		µg/L	60	1,0	04/11/22	VB22D11B	0411/22 19:33	VB22D11B	KCM
40. Methylene Chloride	U		pg/L	5.0	1.0	04/11/22	VB22D11B	0411/22 19:33	VB22D118	KON
41.2-Methylnaphthsiene	U		µg/L	5.0	1.0	04/11/22	V822D118	04/11/22 19:33	VB22D11B	KCN
42.MTBE	U		µg/L	5.0	1.0	94/11/22	VE22011B	04/11/22 19:33	VB22D11B	KGN
43. Naphthalene	U		µg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
44. p-Propylberzene	- U		µg/L	1.0	1/0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
45. Styrene	U		MOT.	1.0	1.0	04/11/22	VB22011B	04/11/22 19:33	VB22011B	KCM
46.1,1,1,2 Telrachloroethane	Ti.		µg/L	1.0	1,0	64/11/22	VB22011B	04/11/22 19:33	VB22D11B	KCM
47.1,1,2,2-Tetrachloroethane	U		pg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D118	KCM
48: Tetrachlorgethene	Ü		µg/L	1.0	1,0	04/11/22	VB22011B	04/11/22 19:33	VB22D11B	KON
49. Toluene	n		HD/L	1.0	1,0	04/11/22	VR22011B	64/11/22 19:33	VB22D11B	KON
60.1,2.4-Trichloroberstene	П		µg/L	5,0	1,6	04/11/22	VB22D11B	04/11/22 19:33	VB22D118	KON
51,1,1,1-Trichlorpethane	- U		pg/L	1.0	1.0	94/11/22	VB22011B	0411/2219:33	VB22011B	KCN
# 52.1,1,2-Trichloroethane	ii.		μg/L	1.0	1.0	04/11/22	VB22011B	04/11/22 19:33	VB22D11B	KON
53. Trichioroethone	U		µg/L	1.0	1.0	04/11/22	VB22011B	04/11/22 19:33	VB22D118	KON
54, Trichioroffuoromethane	U		µg/L	1.9	1,0	94/11/22	VB22011B	04/11/22 19:33	VB22011B	KON
85.1,2,3-Trichloropropane	U		pg/L	1.0	1.0	04/11/22	V822011B	04/11/22 19:33	VB22D11B	KON
± 56, 1,2,3-Trimethylbenzene	n		pg/L	1.0	1.0	04/11/22	VB22011B	04/11/22 19:33	VB22D11B	KCN
57, 1,2,4-Trimethylbenzene	U		HO/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VE22D11E	KCM
58, 1,3,5-Trithe thylbenzene	U		µg/E	1.0	1.0	94/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KGN
59, Vinyl Chloride	U		pg/L	10	1.0	84/11/22	VB220118	04/11/22 19:33	VB220118	KOM
60,map-kylene	U		µg/L	2.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KGM
61.o-Xylene	U		μρ/L	1.0	1.0	64/11/22	VB22011B	04/11/22 19:33	VB22011B	KON
			-					The second second	-	

3.0

1.0

04/11/22

µg/L

ij

VB22011B 0411/2219:33 VB22D11B KOM



Analytical Laboratory Report Laboratory Project Number: A07873

Order: A07973 Date: 04/12/22

Definitions/ Qualifiers:

- A: Spike recovery or precision unusable due to dilution.
- B: The analyte was detected in the associated method blank.
- E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
- J: The concentration is an estimated value.
- M: Modified Method
- U: The analyte was not detected at or above the reporting limit.
- X: Matrix Interference has resulted in a raised reporting limit or distorted result.
- W: Results reported on a wet-weight basis.
- *: Value reported is outside QC limits

Exception Summary:

: Recovery in the associated laboratory sample (LCS) exceeds the upper control limit. Results may be blased high. L+

: Recovery in the associated continuing calibration verification sample (CCV) exceeds the upper control limit. Results

Analysis Locations:

All analyses performed in Holt.



Accreditation Number(s):

T104704518-19-8 (TX)

EXHIBIT 3

April 14, 2022 - EGLE Response to ZF April 8 and April 13, 2022 Letters RE: Additional Information for Consideration



STATE OF MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

LANSING



April 14, 2022

VIA E-MAIL

Robert Bleazard Sr. EHS Manager Environmental Remediation ZF Health, Safety, and Environment ZF Active Safety US Inc. 12001 Tech Center Drive Livonia, Michigan 48150-2122

SUBJECT: Response to ZF Active Safety US Inc. Additional Information for

Consideration Related to Administrative Order for Response Activity;

EGLE Docket No. AO-RRD-22-001 (AO)

Dear Robert Bleazard:

The Department of Environment, Great Lakes, and Energy (EGLE) has received ZF Active Safety US Inc. (ZF) correspondence dated April 8, 2022, and April 13, 2022, containing technical information for EGLE's consideration pertaining to the potentially anomalous groundwater parameters in monitoring well OW-16D2 during sampling.

Although EGLE agrees that the information presented by ZF warrants additional investigation by ZF, EGLE does not believe the information presented thus far demonstrates that there is no imminent and substantial endangerment to the public drinking water supply for the Village of Milford. Therefore, EGLE cannot grant ZF's requested extension of the AO response deadline, and EGLE expects ZF's timely compliance with the AO.

If ZF intends to submit a work plan to undertake a parallel path to further investigate concerns regarding the integrity of OW-16D2, EGLE does not discourage those efforts, however the work plan should provide for the following:

- Continue to rehabilitate monitoring well OW-16D2 with mechanical and/or additive techniques. Collect post-rehabilitation groundwater samples for a sufficient period of time to demonstrate the samples are representative of aquifer conditions.
- Complete vertical aquifer profiling in close proximity to OW-16D2 to verify the screen is in the zone of highest contamination. Based on the completed vertical aquifer profile, if the depth of contamination differs from the screening interval of OW-16D2, install a new monitoring well to be screened at the depth of the highest level of contamination.

Install a new monitoring well to replace OW-16D2 if it cannot be rehabilitated.
 The new monitoring well shall be screened based on the conclusions from the vertical aquifer profiling.

EGLE remains open to reconsider its position regarding the Administrative Order if additional data demonstrates that there is not an imminent and substantial risk to the Village of Milford's drinking water wells.

If you have questions regarding this matter, please contact Kevin Wojciechowski, Project Manager, at 586-623-2948 or WojciechowskiK@Michigan.gov; or you may contact me.

Sincerely,

Mike Neller, Director Remediation & Redevelopment Division 517-512-5859

cc: Danielle Allison-Yokom, Michigan Department of Attorney General Aaron B. Keatley, Chief Deputy Director, EGLE Joshua Mosher, EGLE Mary Miller, EGLE Dan Yordanich, EGLE Paul Owens, EGLE Darren Bowling, EGLE Cheryl Wilson, EGLE Tiffany Yusko-Kotimko, EGLE Kevin Wojciechowski, EGLE

Lyndsey Hagy, EGLE Katie Noetzel, EGLE

EXHIBIT 4

November 23, 2021 - ZF Response to EGLE Compliance Communication



ZF Active Safety US Inc. 12001 Tech Center Drive, Livonia, Michigan 48150-2122

VIA EMAIL: WojciechowskiK@Michigan.gov AND CERTIFIED MAIL

Mr. Kevin Wojciechowski, Project Manager Warren District Office -Remediation and Redevelopment Division Michigan Department of Environment, Great Lakes, and Energy 27700 Donald Court Warren, Michigan 48092 Department From

Phone Email Date Health Safety and Environmental

Scott Detwiler +1 480 722-4139 Scott.Detwiler@zf.com November 23, 2021

RE:

ZF Active Safety US Inc. Response to Michigan Department of Environment, Great Lakes, and Energy Compliance Communications Regarding the Facility Located at 101 Oak Street, Milford, Michigan.

EGLE Facility ID No. 63000952

Dear Mr. Wojciechowski:

This letter and the accompanying Response Activity Plan (ResAP) include ZF Active Safety US Inc.'s (ZF's) response to Compliance Communication letters from the Michigan Department of Environment, Great Lakes, and Energy (EGLE), dated September 1, 2021; received by ZF on September 13th (the September 2021 Letter) and dated October 25, 2021; received by ZF on November 9th (the October 2021 Letter). The two Letters state that they are related to the former Kelsey-Hayes property located at 101 Oak Street, Milford, Michigan (the "Facility" or the "Property") for which ZF retains some clean-up responsibility. However, ZF is no longer the owner of the Property.

The primary issue presented by EGLE in both of the Letters is related to groundwater sampling data collected by ZF from an Observation Well (OW-16D2) that exceeded the Part 201 generic drinking water criterion for vinyl chloride. Observation Well OW-16D2 is less than 200 feet from Village of Milford (Milford's) drinking water wells.

The September 2021 Letter requests that ZF submit a ResAP with a schedule, that when implemented, will achieve the cleanup criteria or protect from exposure to the contamination; to demonstrate compliance with Part 201 by 90 days. ZF and its consultant, Arcadis, were in the process of preparing the ResAP within the requested time period, when the October 2021 Letter was received by ZF. The October 2021 Letter requests that ZF initiate the interim response measure of installing treatment on the Milford drinking water system within 14 days of receipt of the October 2021 Letter. Given the two parallel requests from EGLE and the fact that ZF was already in the process of responding to the September 2021 Letter when it received the October 2021 Letter, this response addresses the issues raised in both of the EGLE Letters. The information presented below describes the response activities that ZF has taken at the Facility, including the information provided in the attached ResAP requested by EGLE.

ZF Active Safety US Inc. 12001 Tech Center Drive Livonia, Michigan 48150-2122 USA Phone: +1 734 855-2600 www.zf.com In addition, the information below provides ZF's response to EGLE's request to initiate the interim response measure of installing treatment on the Milford drinking water system.

I. September 2021 Letter and EGLE Request for a ResAP:

As noted above, the September 2021 Letter discusses the presence of vinyl chloride above the Part 201 drinking water criterion in Observation Well OW-16D2, and includes EGLE's request that ZF submit a ResAP with a schedule, that when implemented, will achieve the cleanup criteria or protect from exposure to the contamination. The following response actions have been completed or are ongoing with respect to the Property:

a. Immediately taking measures to contain or remove the contamination source

Numerous response actions have been implemented to address chlorinated volatile organic compound (CVOC) impacts at the Facility and include excavation and removal of impacted soil, installation and operation of a soil vapor extraction (SVE) system, and installation and operation of a groundwater extraction and treatment system (groundwater treatment system). Details of these interim response measures were reported to EGLE in the *Summary of Environmental Response Activities* (Haley and Aldrich of Michigan, LLC 2002) and *Remedial Action Plan* (Arcadis 2009). The combination of these interim responses and the continued operation and performance monitoring of the groundwater treatment system, combined with appropriate land-use restrictions, render relevant exposure pathways incomplete, thereby preventing potential threats to public health, safety, or welfare and to the environment.

b. Immediately identifying and eliminating any threat of fire or explosion or direct contact hazards

There are no threats of fire or explosion, or direct contact hazards associated with the detection of CVOCs at any observation wells sampled as part of the ongoing groundwater monitoring at the Facility. Concentrations of CVOCs detected are several orders of magnitude below the flammability and explosivity screening levels for groundwater. In addition, CVOCs detected in groundwater at Observation Well OW-16D2 are approximately 95 feet below grade. Groundwater concentrations observed at OW-16D2 do not exceed the generic drinking water criteria (except for vinyl chloride which was reported at concentrations of 3.5 and 3.0 ug/L during two sampling events on May 13 and August 3, 2021, and has not been above the drinking water criteria in the last six sampling events since August 3rd) and therefore do not pose unacceptable risks due to direct contact with groundwater. Continued groundwater sampling at this well from August 16 to October 25, 2021 did not indicate the presence of vinyl chloride or any other CVOCs above the generic drinking water criteria.

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c. Notifying EGLE and affected neighbors if contamination has migrated off the property

Impacted parties affected by the migration of property-related impacts from beyond the Facility boundaries have been notified of such migration in accordance with Rule 522(4). Documentation of the notices were reported in the *Remedial Action Plan* (Arcadis January 2009). For properties located along the east side of Cabinet Street between Commerce and Liberty Streets, documentation was provided in *Final Notice of Migration Letters* (Arcadis January 2011). EGLE was previously provided copies of the notices in accordance with the Part 201 notification requirements.

d. Delineating the extent of contamination

The nature and extent of soil and groundwater CVOC impacts related to the former Kelsey-Hayes Property have previously been delineated.

Documentation of the soil delineation is presented in the *Supplemental Soil Delineation Report*, which is Appendix A of the *Remedial Action Plan* (Arcadis January 2009), the *Technical Memorandum Regarding the Remedial Action Plan* (Arcadis January 2010), and the *2010 Site Investigation Activities and Current Site Conditions Report* (Arcadis March 2011).

Groundwater has been investigated at the Property since 1991 through several phases of investigation. A summary of historical groundwater investigations from 1991 to 2001 is presented in the *Summary of Environmental Response Activities* (Haley & Aldrich of Michigan, Inc. 2002) provided to EGLE (formerly MDEQ) on July 24, 2002. Since 2001, additional vertical aquifer profile (VAP) observation well installation and groundwater monitoring events have been performed to further define and verify the extent of groundwater impacts associated with the Facility. This work is documented in the *Groundwater Investigation Summary Report*, which is Appendix D of the *Remedial Action Plan* (Arcadis January 2009), the *Technical Memorandum Regarding the Remedial Action Plan* (Arcadis January 2010), the *June 2010 Investigation at the Intersection of Cabinet and Liberty Streets* (Arcadis August 2010), the *2010 Site Investigation Activities and Current Site Conditions Report* (Arcadis March 2011), and *Interim Groundwater Response Action Activities Summary Reports* (Arcadis 2002-2021), all of which were previously provided to EGLE. The current extent of groundwater impacts above the drinking water criteria and the layout of the groundwater treatment system and groundwater observation wells are presented on Figure 1.

Specific to the Milford municipal well field, groundwater impacts associated with the Site have not been detected south of Liberty Street at concentrations above the generic drinking water criteria, and concentrations trends within the ZF monitoring network are indicative of stable/decreasing trends and an absence of vinyl chloride. The conceptual site model (CSM) informed by multiple lines of evidence indicates a stable plume that is being effectively remediated by ongoing pumping and is therefore not a risk to impact the municipal wells. In addition, as presented in the *Groundwater Flow Model Update and Hydraulic Capture Evaluation* (Arcadis August 2014), and presented on Figure 1, OW-16D2 and the municipal wells are not within the flow path of groundwater emanating from the Facility.

ZF Active Safety US Inc. 12001 Tech Center Drive Livonia, Michigan 48150-2122 USA

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e. Undertaking the cleanup of contamination

As indicated above, numerous response actions have been implemented to address CVOC impacts at the Site and include excavation and removal of impacted soil, installation and operation of a SVE system, and installation and operation, and later enhancement of a groundwater treatment system. The treatment system enhancement work is documented in the *Groundwater Treatment System Optimization Work Plan* (Arcadis August 2011).

As presented in the *Remedial Action Plan* (Arcadis January 2009) all sources of CVOCs (tanks, drums, other containers, and secondary containment structures, as well as grossly impacted soils and foundation materials) have been physically removed from the Site as part of the building decommissioning and demolition, subsequent "hot spot" excavations of impacted subsurface soils have been conducted, and a SVE interim response has been implemented.

Current and historical groundwater monitoring data indicate that the current groundwater treatment system, which has been in operation since 1999, is effectively intercepting impacted groundwater associated with the Site and mitigating further migration of Property-related groundwater impacts above the drinking water criteria. In addition, as presented in the *Groundwater Flow Model Update and Hydraulic Capture Evaluation* (Arcadis August 2014) the Property groundwater treatment system extraction wells are providing adequate hydraulic capture of the Property-related CVOC plume.

f. Observation Well OW-16D2 Sampling

As presented above and demonstrated in the *Groundwater Flow Model Update and Hydraulic Capture Evaluation* (Arcadis August 2014), it's our position that OW-16D2 is not within the flow path of groundwater emanating from the Property. However, at the request of EGLE, ZF, recognizing that Observation Well OW-16D2 was included in the expansive and conservative well network originally developed by ZF, Arcadis/ZF submitted a sampling plan for OW-16D2 to EGLE on August 3, 2021 and October 7, 2021 via email, which was approved by you on October 13, 2021 via email (see Attachment 1). Pursuant to this plan, ZF sampled OW-16D2 bi-weekly until October 25, 2021. The concentrations of vinyl chloride in the last six sampling events conducted on August 16, September 1, September 13, September 27, October 11, and October 25, 2021 were below the generic drinking water criterion. Therefore, the sampling frequency will be monthly for November 2021, December 2021, and January 2022. If the concentration of vinyl chloride remains at or below the generic drinking water criterion during these three, monthly sampling events, the sampling frequency will return to the semiannual sampling schedule per the groundwater monitoring plan. If the generic drinking water criterion for vinyl chloride is exceeded during any of the remaining sampling events, the sampling frequency will be bi-weekly through January 2022.

g. Due Care

ZF is not the owner of the Property and therefore, is not responsible for complying with the due care provisions under Section 20107a of Part 201 that are applicable to the Property.

II. October 2021 Letter and EGLE Request for Interim Response Measure to Install Treatment:

The October 2021 Letter reiterates that vinyl chloride was detected in OW-16D2 above the generic drinking water criteria and states that, "the concentration of vinyl chloride found at the Property (i.e. Facility) and the proximity to the Village of Milford municipal well field makes this an imminent and substantial endangerment to public health, safety and welfare, and steps are required to abate that danger in accordance with Section 20119." The October 2021 Letter then requests that ZF initiate the interim response measure of installing treatment on the Milford drinking water system.

ZF disagrees that there is an imminent and substantial endangerment to public health, safety, and welfare that is being caused by the chlorinated solvent plume from the former Kelsey-Hayes Property. The information presented below, includes historical and current data collected by both ZF and other parties, that supports this conclusion.

The following information previously submitted by ZF to EGLE¹ supports ZF's contention that CVOC's from the former Kelsey-Hayes Property are not an imminent and substantial endangerment to public health, safety and welfare, including:

- Vinyl chloride detections in groundwater at the Property were limited to the former storage pad area (see Figure 1) in investigations conducted between 1999 and 2011, with no vinyl chloride detected recently in any wells monitored by ZF.
- Vinyl chloride previously detected in groundwater wells between 1999 and 2011 within the former storage pad area is located upgradient of and entirely within the capture zones of ZF's active groundwater extraction wells. This groundwater treatment system has been in operation since 1999 and has been providing continuous hydraulic capture of groundwater impacts associated with the Facility.
- ZF has completed delineation of groundwater impacts associated with the Facility. None of the
 observation wells hydraulically downgradient of the facility at Liberty Street exceed the drinking
 water criteria.

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¹ This information has previously been provided to EGLE in the following reports: 1) Remedial Action Plan (Arcadis January 2009); 2) 2010 Site Investigation Activities and Current Site Conditions Report (Arcadis March 2011).

- ZF has implemented multiple aggressive remedial actions including, source area excavations, soil
 vapor extraction (SVE), and a groundwater extraction and treatment system at the Facility. These
 remedies have been executed and completed during the past 25 years and the groundwater
 extraction and treatment system is continuing.
- ZF expanded the groundwater extraction and treatment system by installing PW-4 to specifically target groundwater impacts that were beyond the hydraulic influence of the Commerce Road ZF extraction wells.
- Results from numeric groundwater modeling completed by Arcadis, and shown on Figure 1, clearly shows that the groundwater extraction and treatment system completely captures the impacts from the Facility and shows the location of the ZF plume outside the hydraulic capture of the Milford municipal wells.

ZF has been collecting samples from OW-16D2 since 1998 and vinyl chloride has not been detected above the generic drinking water criteria in any samples collected until recently, in May 2021 and August 2021. The concentrations of vinyl chloride detected at OW-16D2 during the last six sampling events conducted between August 16th and October 25th, 2021 were all below the generic drinking water criteria for vinyl chloride.

Date	Vinyl Chloride (ug/L)	Drinking Water Criteria (ug/L)
May 13	3.5	2.0
June 8	1.2	2.0
August 3	3.0	2.0
August 16	1.8	2.0
September 1	1.7	2.0
September 13	1.6	2.0
September 27	1.8	2.0
October 11	1.4	2.0
October 25	1.5	2.0

Based on a several summaries of the data for the Milford municipal well system that have been provided to ZF and Arcadis, vinyl chloride has never been detected in Milford's municipal wells or associated distribution systems during the last 32 years. Therefore, based on the information that ZF has, it does not appear that there is an imminent and substantial endangerment to public health, safety and welfare and the installation of a treatment system on the Village of Milford drinking water system is not necessary.

In addition, there is no basis to conclude vinyl chloride at the levels detected in OW-16D2 will result in vinyl chloride being detected above drinking water criteria in Milford's municipal wells or its municipal water system.

Phone: +1 734 855-2600

In sharp contrast to OW-16D2, the Milford municipal wells have screens 20 feet long with an average pumping rate of 470 gallons per minute (gpm) and draw water from a large area, including to the east and south (i.e., the opposite direction of OW-16D2). Because the municipal wells draw groundwater from such a large area, even if vinyl chloride were to migrate from OW-16D2 to the municipal wells (which there is no evidence of) it would not cause an exceedance of the generic drinking water criteria in the municipal water.

Finally, ZF disputes EGLE's assertion that the source of the vinyl chloride found in OW-16D2 is from the former Kelsey-Hayes Property. Observation well OW-16D2 and the Milford municipal wells are not within the flow path of groundwater emanating from the Property. There are multiple other confirmed sources of CVOC contamination near and upgradient of OW-16D2, which include vinyl chloride as a contaminant, and several known CVOC plumes in the Village of Milford. The other known sources include the former Spiral Industries site and the Coe's Cleaners site, discussed further below. See attached **Figure 1**, which shows the known source areas and the municipal well capture zone within the Village of Milford. The Spiral Industries site and the Coe's Cleaner site are upgradient of and directly in the groundwater flow path of OW-16D2 and the Milford municipal wells. Based on the probability that other sites may be the source of the vinyl chloride found in OW-16D2, and the multiple lines of evidence that ZF has that the Property is not the source of vinyl chloride impacts in OW-16D2, ZF contends that there is no conclusive evidence regarding the source of the vinyl chloride in OW-16D2. Therefore, ZF disputes EGLE's presumption that the former Kelsey-Hayes Property is the source.

a. Former Spiral Industries - 140 and 150 West Summit Street

The former Spiral Industries site is located north of the Milford municipal wells. Based on a Baseline Environmental Assessment (BEA) submitted to EGLE in June 2014, concentrations of CVOCs detected at the former Spiral Industries site include, but are not limited to: vinyl chloride (Soil: 709 ug/kg and Groundwater: 280 ug/l), trichloroethene (Soil: 2,620,000 ug/kg and Groundwater: 153 ug/l), and cis-1,2 dichloroethene (Soil: 215,000 ug/kg and Groundwater: 650 ug/l). The concentrations of vinyl chloride at Spiral Industries are more than two times higher than any vinyl chloride concentrations ever detected at the former Kelsey-Hayes Property. Unlike the Property, the former Spiral Industries site is directly upgradient of and within proximity to the Milford municipal well capture zone. EGLE should be aware of this information based on EGLE's acknowledgement of receipt of the BEA.

Furthermore, the BEA for the Spiral Industries site indicates that:

- The property is a "Facility" as defined by Part 201.
- The source, nature and extent of contamination at the property is not fully delineated.
- Soil and groundwater contamination at the site, including with vinyl chloride and other CVOCs, is within the Village of Milford and directly upgradient of the Milford municipal wells.
- To ZF's knowledge this site has not yet implemented response actions and therefore, represents an unmitigated risk to the Village of Milford municipal wells.

ZF Active Safety US Inc. 12001 Tech Center Drive Livonia, Michigan 48150-2122 USA

Phone: +1 734 855-2600

b. Former Coe's Cleaners site - West of Main Street just north of Center Street

As for the Coe's Cleaners site, EGLE has also long been aware of and directly overseeing the ongoing investigation and cleanup of CVOCs emanating from this site. The groundwater monitoring wells associated with this site are located immediately upgradient of and within the Milford municipal well capture zone, as determined by the model results and shown on Figure 1. The concentrations of tetrachloroethene detected in soil samples collected at the former Coe's Cleaner site during an August 2007 investigation performed by Weston Solutions, Inc., ranged from 51 ug/kg to 22,000 ug/kg. There has been no source area removal or remediation performed at the Coe's Cleaner site.

III. Conclusion:

As detailed above and previously presented in various reports to EGLE, ZF has performed extensive response actions including site investigations and remediation at the Property and surrounding area for many years. These actions have achieved consistent compliance with Part 201 requirements. ZF continues to perform ongoing response actions associated with the Property, such as operating an active groundwater pumping remedy and completing groundwater monitoring. These remedies continue to be effective at removing CVOC mass from the aquifer and preventing the migration of contaminants from the Property. During the past 30 years, ZF has implemented response activities to achieve cleanup criteria or protect from exposure to the contamination at the Property and continues to do so.

Furthermore, based on the information presented in this letter, ZF disputes EGLE's assertion that there is an imminent and substantial endangerment to public health, safety, and welfare that is being caused by the chlorinated solvent plume from the Property. Based on the multiple lines of evidence that ZF has presented in this response, there is no conclusive evidence regarding the source of the vinyl chloride in OW-16D2 and ZF disagrees with EGLE's presumption that the former Kelsey-Hayes Property is the source. ZF does not have any information indicating that the Village of Milford drinking water system has been or could imminently be impacted with vinyl chloride. Therefore, it does not appear that there is an imminent and substantial endangerment to public health, safety and welfare and the installation of a treatment system on the Village of Milford drinking water system is not necessary and is not ZF's responsibility.

In light of the extensive response actions already undertaken by ZF, the complex history of CVOC contamination in the Village of Milford, and EGLE's request that ZF initiate plans to install treatment on the Milford municipal wells, ZF believes a technical meeting with EGLE would be a productive next step. Arcadis and ZF have made multiple attempts to schedule such a meeting with EGLE, most recently by calling you on November 9th. ZF would appreciate hearing from you regarding some dates and times that EGLE would be available to schedule a technical meeting. Please contact me at your earliest convenience.

ZF Active Safety US Inc. 12001 Tech Center Drive Livonia, Michigan 48150-2122 USA

Phone: +1 734 855-2600

Sincerely,

ZF Active Safety US Inc.

Scott D. Detwiler Regional EHS Manager

ZF Health Safety and Environmental

Cc: John McInnis, Arcadis

Robert Bleazard, ZF Group Kelly M. Martorano, ZF Group

Attachments: Attachment 1 - Email Correspondence with K. Wojciechowski

Figure 1 - Municipal Well Capture Zone and Known CVOC Sources

Phone: +1 734 855-2600

Attachment 1

McInnis, John

From: Wojciechowski, Kevin (EGLE) <Wojciechowskik@michigan.gov>

Sent: Wednesday, October 13, 2021 12:49 PM

To: McInnis, John

Cc: Detwiler Scott MSA HEEN; Christian Wuerth; Owens, Paul (EGLE); Wilson, Cheryl (EGLE);

Dewyre, Robin (robin.dewyre@amecfw.com); Mark Sweatman; Christian Wuerth; Mike

Karl

Subject: RE: Monitoring Well 16D2 Sampling

John,

Continue to monitor OW-16D2 as scheduled below.

Thanks,

Kevin Wojciechowski

Senior Environmental Quality Analyst
Michigan Department of Environment, Great Lakes, and Energy
Remediation Redevelopment Division
Warren District Office

Cell: 586-623-2948

wojciechowskik@michigan.gov

Pollution Emergency Alerting System: 1-800-292-4706

From: McInnis, John < John. McInnis@arcadis.com>

Sent: Thursday, October 7, 2021 9:53 AM

To: Wojciechowski, Kevin (EGLE) < WojciechowskiK@michigan.gov>

Cc: Detwiler Scott MSA HEEN <scott.detwiler@zf.com>; Christian Wuerth <cwuerth@villageofmilford.org>; Owens, Paul

(EGLE) <OWENSP@michigan.gov>; Wilson, Cheryl (EGLE) <WILSONC3@michigan.gov>; Dewyre, Robin

(robin.dewyre@amecfw.com) <robin.dewyre@amecfw.com>; Mark Sweatman <mark.sweatman@woodplc.com>;

Christian Wuerth <cwuerth@villageofmilford.org>; Mike Karll <mkarll@villageofmilford.org>

Subject: RE: Monitoring Well 16D2 Sampling

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Good morning Kevin,

Currently, we are operating in accordance with the Observation Well 16D2 sampling plan submitted to EGLE on August 3, 2021 via email. Sampling of Observation Well OW16D2 will continue bi-weekly, at a minimum, until October 25, 2021. The concentrations of vinyl chloride in the last three sampling events conducted on 8/16/21, 9/1/21, and 9/13/21 were below the drinking water criterion (DWC). If concentrations of vinyl chloride remain at or below the DWC for the next three sampling events (9/27/21, 10/11/21, and 10/25/21), the sampling frequency will change to monthly for the following three months (November 2021, December 2021, and January 2022). If the concentration of vinyl chloride remains at or below the DWC during these three months, the sampling frequency will return to the semiannual sampling schedule per the groundwater monitoring plan. If the DWC for vinyl chloride is exceeded during any of the remaining

sampling events, the sampling frequency will remain at bi-weekly during the months of November 2021, December 2021, and January 2022.

Regarding the request for a Response Activity Plan (ResAP), we are reviewing site information and are planning to provide the ResAP in accordance with the 90-day schedule mentioned in the Compliance Communication, dated September 1, 2021.

I was able to track down a copy of the 1998 Techna Interim Response Work Plan if you still need it.

Please let me know if you have any questions.

Thanks, John

From: Wojciechowski, Kevin (EGLE) < WojciechowskiK@michigan.gov >

Sent: Wednesday, October 6, 2021 12:31 PM **To:** McInnis, John < <u>John.McInnis@arcadis.com</u>>

Cc: Detwiler Scott MSA HEEN <scott.detwiler@zf.com>; Christian Wuerth <cwuerth@villageofmilford.org>; Owens, Paul

(EGLE) < owensp@michigan.gov >; Wilson, Cheryl (EGLE) < WILSONC3@michigan.gov >; Dewyre, Robin

(robin.dewyre@amecfw.com; Mark Sweatman mark.sweatman@woodplc.com;

Christian Wuerth < cwuerth@villageofmilford.org>; Mike Karll < mkarll@villageofmilford.org>

Subject: RE: Monitoring Well 16D2 Sampling

Good afternoon John,

What is ZF Corps plans for sampling OW-16D2 after the last October monitoring event? How are things progressing on the Response Active Plan for the groundwater? Now that we have received more data from the wells in the park the hit of vinyl chloride is not going away. Wood has found some old data from when these wells were installed, EGLE is going to be looking for the actual report from the 1990's because Wood doesn't have the complete report. This data is the vertical aquifer profiling that was done when the wells were installed. We can have a meeting once EGLE can track down that report.

Mark, what was the title and date of that vertical aguifer sampling report?

Thanks,

Kevin Wojciechowski

Senior Environmental Quality Analyst
Michigan Department of Environment, Great Lakes, and Energy
Remediation Redevelopment Division
Warren District Office

Cell: 586-623-2948

wojciechowskik@michigan.gov

Pollution Emergency Alerting System: 1-800-292-4706

From: Samp, Marina < <u>Marina.Samp@arcadis.com</u>>

Sent: Thursday, August 5, 2021 1:46 PM

To: Mike Karll <mkarll@villageofmilford.org>; Wojciechowski, Kevin (EGLE) <WojciechowskiK@michigan.gov>

Cc: Detwiler Scott MSA HEEN <scott.detwiler@zf.com>; Christian Wuerth <cwuerth@villageofmilford.org>; McInnis,

John < John. McInnis@arcadis.com>

Subject: RE: Monitoring Well 16D2 Sampling

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Hi Kevin and Mike,

A tentative schedule for the next couple months is outlined below. Field staff have reviewed and indicated this will work with their schedules so I do not anticipate too many, if any, changes at this time. Contact info for field staff is listed below in the event it is needed.

- Monday, August 16th at 9:30 AM (Stacey Hannula/Emma Witherspoon)
- Wednesday, September 1st at 9:30 AM (Stacey Hannula/Allyson Hartz)
- Monday, September 13th at 9:30 AM (Allyson Hartz)
- Monday, September 27th at 9:30 AM (Allyson Hartz)
- Monday, October 11th at 9:30 AM (Stacey Hannula)
- Monday, October 25th at 9:30 AM (Stacey Hannula)

Allyson Hartz: 313-401-7398 Stacey Hannula: 517-203-8600

Please let John or myself know if there are any questions or concerns with this schedule.

Thanks!

From: McInnis, John < John.McInnis@arcadis.com >

Sent: Thursday, August 5, 2021 9:50 AM

To: Mike Karll <mkarll@villageofmilford.org>; Wojciechowski, Kevin (EGLE) <WojciechowskiK@michigan.gov>

Cc: Detwiler Scott MSA HEEN < scott.detwiler@zf.com >; Samp, Marina < Marina.Samp@arcadis.com >; Christian Wuerth

<cwuerth@villageofmilford.org>

Subject: RE: Monitoring Well 16D2 Sampling

Thanks Mike,

Marina has been working on a tentative schedule for the sampling of Monitoring Well 16D2 and will pass it around to the group.

Thanks, John

From: Mike Karll < mkarll@villageofmilford.org >

Sent: Wednesday, August 4, 2021 4:36 PM

To: McInnis, John < John.McInnis@arcadis.com >; Wojciechowski, Kevin (EGLE) < WojciechowskiK@michigan.gov >

Cc: Detwiler Scott MSA HEEN <scott.detwiler@zf.com>; Samp, Marina <Marina.Samp@arcadis.com>; Christian Wuerth

<cwuerth@villageofmilford.org>

Subject: RE: Monitoring Well 16D2 Sampling

Good afternoon John,

That should not be an issue. We do have Milford Memories the weekend prior but cleanup should be wrapping up by then. Could you please provide a tentative schedule for the future sampling events for the next couple of months?

Thank you,

Mike Karll
Director of Public Services
Village of Milford

Office: 248-685-3055 Cell: 248-396-2315 Fax: 248-684-3465

From: McInnis, John

Sent: Wednesday, August 4, 2021 3:30 PM
To: Wojciechowski, Kevin (EGLE); Mike Karll
Cc: Detwiler Scott MSA HEEN; Samp, Marina
Subject: Monitoring Well 16D2 Sampling

Hi Kevin and Mike,

Any conflicts with conducting the next sampling event of Monitoring Well 16D2 on August 16, 2021 around 9 AM?

Thanks, John

John McInnis PE Senior Engineer/Project Manager Arcadis of Michigan, LLC 28550 Cabot Drive Suite 500 | Novi, MI | 48377 | USA T +1 248 994 2285 M +1 248 982 9674 www.arcadis.com











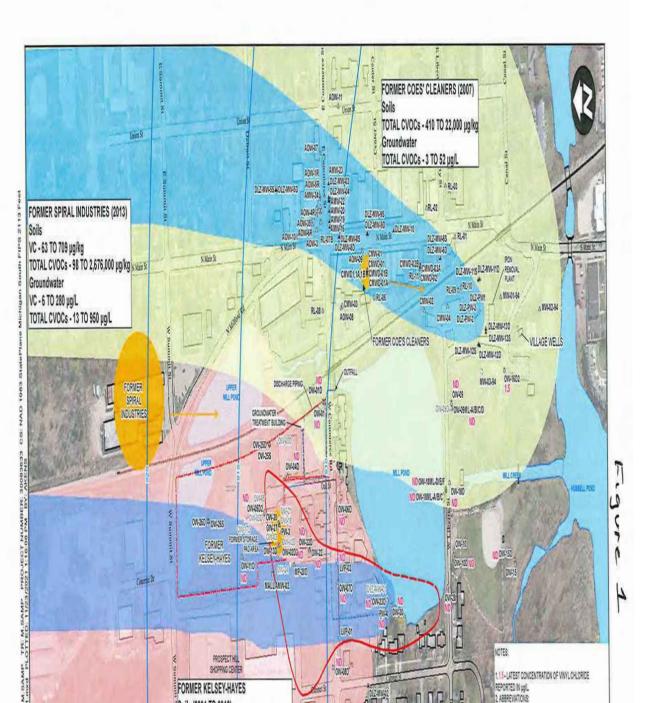
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MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY REMEDIATION AND REDEVELOPMENT DIVISION PO BOX 30426, LANSING, MICHIGAN 48909-7926

Request for EGLE Review of Response Activity Plan

This form is required for submittal of a request for EGLE to review a Response Activity Plan, under Section 20114b, Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended.

Section A: Type o	f Response /	Activity Plan beir	ng Submitted (Ch	neck all that apply):	
Remedial Invest	igation			20b(2)Site Specific Criteria	
Evaluation Plan	_		\boxtimes	(modification of generic criteria)	_
Feasibility Study	,			20b(3) Site Specific Criteria or Surrogate	
Remedial Action	ı Plan			(no generic criteria available)	
Interim Respons	e Plan			Section 20118(4) and (5) Request	
Mixing Zone Red				Land or Resource Use Restrictions	
20e(14) De Mini		pact	П	Other, Specify:	i i
, ,	•	•	_		_
(entire facility a	s defined by	n addresses the Part 201, all rel	eases, hazardo	us substances, and environmental media)	
Please specify	the release(s), hazardous sı	ubstance(s), env	vironmental media, and/or portions of the facilit oride at Observation Well OW-16D2.	y addressed by
Section B: Facil			k all that apply):		
Facility regulate					\boxtimes
Part 201 Facility	<u>[,] ID (if knowr</u>	<u>n)</u> : 63000952			
Leaking Underg	round Storag	ge Tank regulate	ed pursuant to F	Part 213	
Part 211/213. F			·		
Oil or gas produ	ction and de	evelopment regu	lated pursuant t	o Part 615 or 625	
Licensed landfill	regulated p	ursuant to Part	115		
				acility regulated pursuant to Part 111	
i		· ·	•	denity regulated pursuant to Fart 111	
Consent Agreen	nent or other	r legal agreemei	nt with EGLE		Ш
	eachean a seneral c	escent of the december of the			MEDANGA PERSAMBINAN AND AND
Section C: Facility			In a control	I County Caldand	
Facility Name: Fo	ormer Keise	y-nayes Plant P	торену	County: Oakland	
Street Address o	of Proporty: 1	Int Oak Street		City/Village/Township: Milford Town: T 2N Range: R 7 E Section	. 10
Street Address 0	i Froperty. I	TOT Oak Street		Quarter: NE Quarter-Quarter: NE	. 10
City: Milford	State: Mic	higan Zin	48381	Quarter: NE Quarter-Quarter: NE	
Oity. Williord	Otate. Mic	ingan zip.	40001	Decimal Degrees Latitude: 42.593101	
Property Tax ID	(include all a	opplicable IDs)·1	6-10-227-018	Decimal Degrees Landuct: 42.666161	
Troporty rantiz	(.pp.://dab.io	0 10 22, 010	Booming Bogrood Bongitado: 00:002 100	
Statue of submitt	er relative to	the property (c	heck all that	Reference point for latitude and longitude: Center of site Main/front door [Front gate/main entrance Other	
apply):				_	
	Former	Current	Prospective		
apply):	Former	Current	Prospective	Collection method:	_
	Former	Current	Prospective		n 🗆

Section D: Submitter Information:

Entity/person requesting review: ZF Active Safety US Inc.			
Contact Person (name and title): Scott Detwiler			
Submitter Address: 12025 Tech Center Drive			
City: Livonia	State: Michigan	Zip: 48150	
Telephone: 480-722-4139	E-Mail: scott.detwiler	@zf.com	
Relationship of contact person to the submitter: Same	C		
Owner Name, if different from submitter: Village of Milford	Company:		
Address: 1100 Atlantic Street City: Milford	State: Michigan	Zip: 48381	
Telephone: 248-684-1515	E-Mail: info@villaged	•	
Telephone. 240-004-1010	L-Iviali. IIIIO@villagec	on miliora.org	
Section E: Are/were the following present at the facility (Check all the	nat apply):		
		Current Previous Unkno	wn
Mobile or Migrating Non-Aqueous Phase Liquids (NAPL)			ļ
Soil contamination above any residential criteria Soil contamination above any non-residential criteria			<u> </u>
Soil aesthetic impacts			<u> </u>
Groundwater contamination above any residential criteria			j
Groundwater contamination above any non-residential cri	teria]
Groundwater aesthetic impacts	0.40 ·]
Soil Gas contamination above residential vapor intrusion		님 님 님] i
Soil Gas contamination above non-residential VI screenin Conditions immediately dangerous to life or health (IDLH)		님 님 님]]
Fire & Explosion hazards related to releases			!]
Contamination existing in drinking water supply			j
Imminent threat to drinking water supply			j
Impact to Surface Water]
Surface Water Sediments above screening levels			
Section F: The following questions assist EGLE in evaluating this rec	quest.		
Known or Suspected Contaminant(s) Type (Check all that appl			
Petroleum 🔲 Volatile Organic Compounds 🛛	Metals	Other	
Current Site Status (Check all that apply):			
Undergoing property transfer Active operations	☐ Inactive o	peration 🛚	
Current Property Use:			
Residential			
Non-residential			
Anticipated Property Use:			
Residential New providential Manuacidential			
Non-residential 🛛			
Estimated Area of Contamination Addressed in Response Acti	on Plan (Cumulative	e):	
Currently undetermined	0.5 acre 🛚		
Migration:			
	Yes	No Unknown	
Has contamination migrated beyond the property boundaries?	\boxtimes		
Has the Notice of Migration been submitted?	\boxtimes		
Facility Investigation Status:			
Ongoing Complete			
Facility Response Activity Status (Check all that apply):			
None ☐ IR Implemented ☒ Response Activity O	ngoing Respo	onse Activity Completed	
Drinking Water Supply for Facility (Check all that apply):	· - ·	<u> </u>	
Municipal Private Well(s) No Current W	/ater Supply ⊠	Municipal Available	
	arer audony IVI	IVIUI IICIDAI AVAIIADIE A	- 1

EGLE Environmental Assistance Center Phone: 800-662-9278

On-site Well(s) (Check all that apply):		
	nercial Production ite Contains Observ	☐ Agricultural/Irrigation ☐ No well on-site ☐ vation Wells Only
Local Drinking Water Supply:		
Is facility in a designated Wellhead Pro Distance to nearest off-site drinking wa		Yes ⊠ No □ t Private □ Municipal ⊠
Surface Water Bodies on or Adjacent to Fac	ility (Check all tha	t apply):
Wetlands ☐ Ditch ☐ Str	eam/River 🏻	Lake/Pond 🛛
Local Surface Water Bodies:		
Distance to nearest wetland: (Downgradient of Site)	Ditch:	Stream/River: Lake/Pond: Approx. 550 Feet
Have other plans been submitted for this fac	•	
Facility Name, if different than this subr Date and Name of most recent submitt Action Plan – 1/11/2010		Plan-1/30/2009 and Tech Memo Regarding Remedial
Section G: Environmental Professional Signatu	re:	
		erials are true, accurate, and complete to the best of my Date: 11/23/2021
Printed Name: Troy Sclafani		Bato. 11/20/2021
Company of Environmental Professional: Arcad	dis	
Address: 28550 Cabot Drive, Suite 500		
City: Novi	Sta	ite: Michigan Zip: 48377
Telephone: 248-994-2288		nail address: Troy.Sclafani@arcadis.com
Section H: Submitter Signature:		
		erials are true, accurate, and complete to the best of my bmitter.
Signature: Left Of St	Da	ate: 11/23/2021
Printed name: Scott Detwiler		
Title/Relationship of signatory to submitter: Reg	gional EHS Manage	r/ZF Active Safety US Inc.
Address: 12025 Tech Center Drive		
City: Livonia	State: Michigan	Zip: 48150
Telephone: 480-722-4139		E-Mail address: scott.detwiler@zf.com

This form and the Response Activity Plan should be submitted to EGLE Remediation & Redevelopment Division District Office for the county in which the property is located, unless the response activity is related to a facility that is regulated by another EGLE Division. A district map is located at www.michigan.gov/EGLErrd. If regulated by another division, contact should be made with that division for information on where to submit the form and plan.

For information or assistance on this publication, please contact the (program), through EGLE Environmental Assistance Center at 800-662-9278. This publication is available in alternative formats upon request.

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This form and its contents are subject to the Freedom of Information Act and may be released to the public.

EGLE Environmental Assistance Center Phone: 800-662-9278

ATTACHMENT 5

Initial and Follow-up Design Meeting Minutes (April 20, May 3, 6, and 10, 2022)

AGENDA and MEETING MINUTES April 20, 2022

Initial Design Meeting Village of Milford Drinking Water System Air Stripper Installation (Discussion Purposes Only)

Pursuant to Paragraph 5.2.a of EGLE Administrative Order AO-RRD-22-001

Introduction

- Completed introduction of call participants representing: ZF, Arcadis, Village of Milford (VOM), Wood (VOM consultant), and EGLE
- ➤ Tiffany Yusko-Kotimko (EGLE) asked who was taking design lead (i.e. VOM/Wood lead with ZF/Arcadis as support, or ZF/Arcadis lead with VOM/Wood as support). Tiffany indicated EGLE has been having conversations with Wood and the Village. Based on the AO, ZF has anticipated that ZF would be driving the design with input from Wood and Village.
- Village's desire is that a solution is designed and installed as quickly as possible that protects the DW supply, and is open to having Arcadis design with Wood providing QC. Tiffany indicated that some of the milestones in the AO were intended to have a more integrated design interface to smooth out the permitting process.
- Roles and responsibility follow-up call currently scheduled for April 27. A follow-up onsite meeting to discuss information with Wood and Village was also suggested.

Project Status – Procurement of Equipment Information/Specifications

- VOM/Wood has started some initial design activities (i.e. site walk, inquiry with equipment suppliers for equipment availability, etc.)
- VOM has reached out to supplier of iron removal equipment to confirm efficacy of that system to remove VC
- ➤ Discussed the fact that no "Force Majeure" provisions exist in the AO, and requested that EGLE (Kevin W.) provide the criteria and documentation expectations for what would be considered legitimate claims of "sufficient cause" for securing relief from compliance dates in the AO due to circumstances beyond our control

Site Layout – Proposed Air Stripper/Building Location

- Discussed possible location of air stripper in either the well building complex or iron removal plant
- Not enough space in any existing buildings, however, likely enough space within the fenced area of the iron removal plant for an additional pad/pedestal for an air stripper

- Information Needs (As-builts-existing site plans, process flow and instrumentation diagrams, equipment specifications, etc.)
 - > VOM confirmed full access to existing site plans/as-builts, flow diagrams, etc.
- EGLE Permitting Requirements (Act 399/Air permit Exemption)
 - > Act 399 Construction Permit will be required
 - Permitting process has to go thru the Village and they have to sign off on any design before it goes to EGLE for permitting
 - Air permit not likely required
 - If sufficient soil disturbed an Erosion Control Permit from the County may be required
- Village of Milford Requirements (Permits, access, working hours/limitations during events, T&C's for working on the water system)
 - These provisions will be further discussed once roles and responsibilities are clearly defined
- 80% Design/Meeting Schedule
 - Discussed the due date for the 80% Design Meeting, per the AO, is within 30 days from today
- Other Design Considerations
 - ➤ Wood mentioned the need to review the design and its impact on the water quality (e.g. ORP, pH, etc.) that could cause issues in the distribution system

MEETING MINUTES May 3, 2022

Design Group Meeting Village of Milford Drinking Water System Vinyl Chloride Treatment System (Discussion Purposes Only)

- Participants (Design Group)
 - Mike Karll, VOM
 - ➤ Kevin Wojciechowski, EGLE (RRD)
 - ➤ Tiffany Yusko-Kotimko, EGLE (DW & EHD)
 - Scott Detwiler, ZF
 - > John McInnis, Brad Hitts, Grant Andrews, Arcadis,
 - Jeshua Hansen, Wood (VOM consultant)
 - > Ted Erickson, IMEG, (Wood consultant)

Design Updates

- Discussed potential options (vinyl chloride treatment system before or after the iron removal system) and preliminary advantages and disadvantages.
- Currently reviewing performance efficiency for various options including using the existing aeration units, larger units, or adding a third unit. Arcadis indicated that a preliminary review was performed by DeLoach Industries, Inc. (the proposed manufacturer of the air stripping units), but further analysis was underway.
- A review of the potential maintenance requirements was requested with the new air stripping units.
- ➤ It was recommended that an extra set of the packing media be provided as part of the specifications to help facilitate the cleaning process.
- ➤ A review of the stand-by power source was requested if an increase in the well pumps is required.

Other Design Considerations

➤ Tiffany Yusko-Kotimko indicated that the 10 States Standards need to be reviewed under Section 4.7 and 4.75 which includes requirements for air stripping units.

Information Needs

No concerns with receiving access to existing site plans/as-builts, flow diagrams, etc. from the VOM.

MEETING MINUTES May 6, 2022

Design Group Meeting Village of Milford Drinking Water System Vinyl Chloride Treatment System (Discussion Purposes Only)

- Participants (Design Group)
 - Mike Karll, VOM
 - ➤ Kevin Wojciechowski, EGLE (RRD)
 - ➤ Tiffany Yusko-Kotimko and Nick Swiger, EGLE (DW & EHD)
 - Scott Detwiler, ZF
 - > John McInnis, Arcadis,
 - Rob Dewyre and Jeshua Hansen, Wood (VOM consultant),

Design Updates

- Arcadis presented four options for the vinyl chloride treatment system and discussed advantages and disadvantages. Performance data was also presented for each option. Option 4 includes two new air strippers placed prior to the iron removal system and potentially upgrades to the two well pumps. This option met the performance requirements of the AO. There were no objections to moving forward with the Option 4 configuration.
- Regarding the basis of design and performance, Arcadis will request updated performance data from DeLoach Industries, Inc. (the proposed manufacturer of the air stripping units) under different flow scenarios for informational purposes only.
- Initial information was also presented on potential maintenance cleaning frequency for the new units.

• Other Design Considerations

➤ Tiffany Yusko-Kotimko indicated that she would review potential corrosion issues resulting from the increased aeration of the proposed air stripping units.

Information Needs

➤ No concerns with receiving access to existing site plans/as-builts, flow diagrams, etc. from the VOM.

MEETING MINUTES

May 10, 2022

Design Group Meeting Village of Milford Drinking Water System Vinyl Chloride Treatment System (Discussion Purposes Only)

- Participants (Design Group)
 - Mike Karll, VOM
 - ➤ Kevin Wojciechowski, EGLE (RRD)
 - ➤ Tiffany Yusko-Kotimko and Nick Swiger, EGLE (DW & EHD)
 - Scott Detwiler, ZF
 - > John McInnis, Brad Hitts, and Grant Andrews, Arcadis,
 - Rob Dewyre and Jeshua Hansen, Wood (VOM consultant),
 - > Ted Erickson, IMEG, (Wood consultant)

Design Updates

- ZF clarified that the design the vinyl chloride treatment system would be based on the performance of criteria stated in the AO which requires treatment of 50 ug/L of vinyl chloride to less than 2 ug/L at a flow rate of 1,375 gpm.
- Arcadis presented the process flow diagram to the for the selected configuration showing two new air strippers placed prior to the iron removal system. There were no objections to the configuration.
- ➤ It was also noted that the well pumps may also need to be upgraded pending analysis of the hydraulics. The proposed air strippers are approximately 10 feet taller than the existing aeration units.
- Arcadis presented a basis of design summary (two air stripping units operated in parallel), preliminary air stripper specifications, and information on air stripper cleaning. Removal efficiency for vinyl chloride at 1,400 and 2,100 gallons per minute met the performance criteria required by the AO (50 ug/L to less than 2 ug/L) according to calculations performed by DeLoach Industries, Inc. (the proposed manufacturer of the air stripping units). There was a question regarding the air stripper meeting NSF standards. The requirement was understood. Arcadis will verify with DeLoach that the components of the air stripping units are NSF certified. Documentation will be provided during the design review process.
- Additional information was also provided on potential cleaning frequency for the new units.
- Arcadis reviewed preliminary stand-by generator electrical requirements but indicated that further evaluation will be performed if new well pumps are needed.
- ➤ It was also noted that an extra set of the packing media be provided as part of the specifications to help facilitate the cleaning process.

• Other Design Considerations

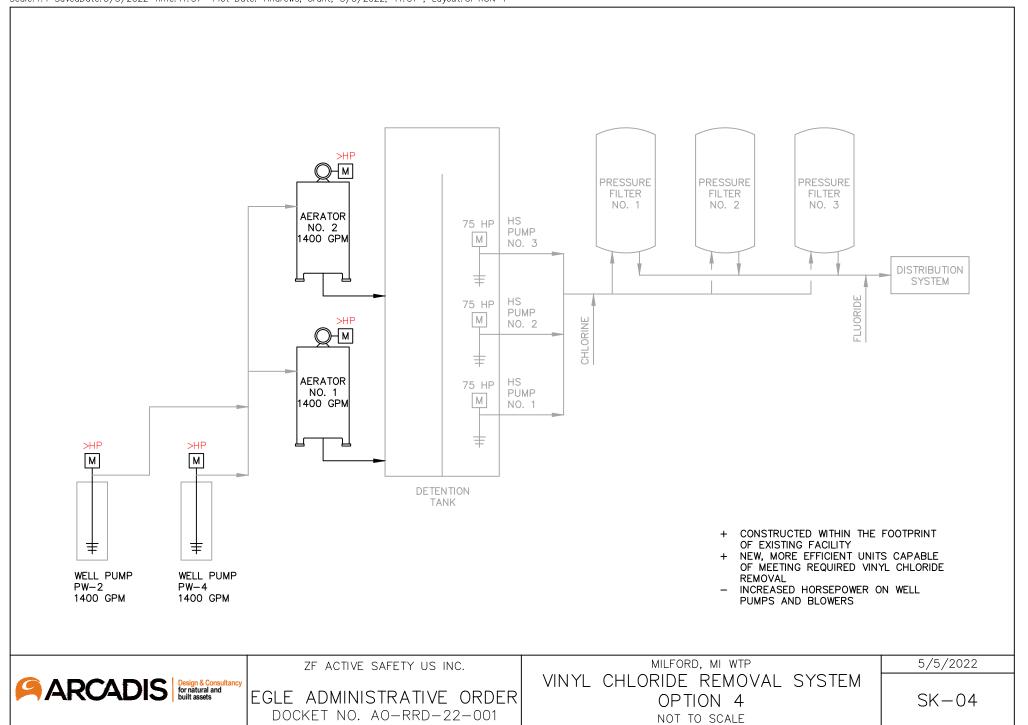
> Tiffany Yusko-Kotimko indicated that she would review potential corrosion issues resulting from the increased aeration of the proposed air stripping units and provide an update by the next meeting.

• Information Needs

> No concerns with receiving access to existing site plans/as-builts, flow diagrams, etc. from the VOM.

ATTACHMENT 6

Draft Process Flow Diagram and Summary of the Basis of Design and Air Stripping Unit Information



DRAFT

Village of Milford Drinking Water System Vinyl Chloride Treatment System

The following information was provided by DeLoach Industries, Inc.

Basis of Design (two air stripping units operated in parallel)

Utilized 7'-6" sq. units with 14' bed depth of 3.5" Tripack, 30:1 A/W ratio (5615 cfm) @ 50 F influent water temperature. Assumed influent vinyl chloride concentration of 50 ug/L and cis-1,2-dichloroethene concentration of 4 ug/L.

Vinyl Chloride removal @1400 gpm - 98.7% (0.7 ug/L)

Vinyl Chloride removal @2100 gpm - 98.0% (1.0 ug/L)

Cis-1,2-dichloroethene removal @ 1400 gpm - 57.6% (1.7 ug/L)

Cis-1,2-dichloroethene removal @ 2100 gpm - 56.4% (1.7 ug/L)

Preliminary Specifications – Each Air Stripping Unit (For Informational Purposes Only)

- a) One (1) aluminum reinforced 7'-6" sq. X 20'-0" tall vessel which will be constructed of 1/4" thick, 3003 or 5052 aluminum. The interior of the vessel shall be completed with a smooth finish.
- b) One (1) water separation demister will be attached to the vessel exhaust to prevent moisture droplets from leaving within the air stream.
- c) One (1) NSF approved distribution system. The distributor shall be a header lateral type design and will be equipped with Munters 1-D nozzles for even distribution of water. The nozzles shall be sized to allow a design flow rate of 1400 GPM.
- d) Four (4) air intake vents with 316 stainless steel screen
- e) One (1) media support grating system
- f) Fourteen (14) feet bed depth of 3.5" Tripack media
- g) Three (3) 24" x 24" access hatches with neoprene gasket and 316 ss 1/4" bolts.
- h) Four (4) elevated anchor legs with structural anchoring angle.
- i) Four (4) lifting lugs
- j) One (1) 12" dia. flanged inlet fitting.
- k) One (1) 12" dia. flanged effluent fitting
- n) One (1) cleanout drain with plug

DRAFT

o) One (1) centrifugal type blower with mounting curb

Make: Loren Cook Model 225 ACEB

S.P. 1.25" CFM 5615 Hp 3 RPM 1725 Volts 230/460 Phase 3

- p) One (1) aluminum ladder with safety cage for access to top of the Air Stripping Tower
- One (1) two rail handrail assembly with kickplate for Air Stripping Tower roof perimeter per OSHA.

Air Stripper Cleaning (For Informational Purposes Only)

Recommendations on cleaning estimates are based on experience. The initial recommendation is to have them cleaned after one-year of operation and then potentially adjusted based on inspections and extent of fouling. They have been building and servicing water treatment systems for over 64 years.

Treatment units are typically cleaned onsite by removing the packing media, cleaning in tanks or specialized equipment, and then placing the media back into the units. Under a service agreement and cleaning program, the packing media is typically removed and replaced with a new set. The dirty set is cleaned and kept in storage. The type of cleaning (pressure washing/use of acid) depends on the fouling.

ATTACHMENT 7

April 22, 2022 ZF Work Plan

ZF Active Safety US Inc. 12001 Tech Center Drive, Livonia, Michigan 48150-2122



Department From

Scott Detwiler +1 480-722-4139

Environmental, Health and Safety

Phone Email Date

Scott.Detwiler@zf.com April 22, 2022

VIA EMAIL: WojciechowskiK@Michigan.gov AND CERTIFIED MAIL

Kevin Wojciechowski, Project Manager Warren District Office Remediation and Redevelopment Division Michigan Department of Environment, Great Lakes, and Energy 27700 Donald Court Warren, Michigan 48092

RE:

ZF Active Safety US Inc. Submittal of the Monitoring Well Rehabilitation and Vertical Aquifer Profiling Work Plan Related to the Department of Environment, Great Lakes, and Energy April 14, 2022 Response to ZF's Additional Information for Consideration Related to Administrative Order for Response Activity; EGLE Docket No. AO-RRD-22-001 (AO) Regarding Former Kelsey-Hayes Company, 101 Oak Street, Milford, Oakland County, Michigan, Facility ID No. 63000952 (the "Site").

Dear Mr. Wojciechowski,

ZF Active Safety US Inc. (ZF) is providing the attached Monitoring Well Rehabilitation and Vertical Aquifer Profiling Work Plan (the "Work Plan") for the Department of Environment, Great Lakes, and Energy's (EGLE's) attention related to the April 14th Letter in Response to Additional Information for Consideration Related to the Administrative Order for Response Activity ("EGLE's April 14th Letter").

Pursuant to the Work Plan, ZF will perform the work listed in EGLE's April 14th Letter and will also conduct additional activities to further investigate, redevelop and possibly replace monitoring well OW-16D2, and gather information to further assess the aquifer. ZF will coordinate with EGLE and the Village of Milford as appropriate regarding the activities set forth in the Work Plan.

Thank you for your attention to these matters and please include this letter and its attachment in the administrative record for the AO and the Site.

If you have any questions, please contact me at the phone number listed in the header on the first page of this letter, Mr. Robert Bleazard – ZF Sr. EHS Manager, Environmental Remediation at 480-722-4866, or Mr. John McInnis of Arcadis at 248-994-2285.

Sincerely,

Scott Detwiler Sr. Regional Manager ZF Environmental, Health and Safety

Enclosures

cc by email only:

Mr. Robert Bleazard, ZF

Ms. Kelly Martorano, ZF

Mr. John McInnis, Arcadis

Mr. Troy Sclafani, Arcadis

Mr. Grant Gilezan, Dykema

Mr. Paul Stewart, Dykema

Mr. Christian Wuerth, Village Manager, Village of Milford

Ms. Polly Synk, Michigan Department of Attorney General

Ms. Danielle Allison-Yokom, Michigan Department of Attorney General

Mr. Aaron B. Keatley, EGLE - Chief Deputy Director, EGLE

Mr. Kevin Wojciechowski, Project Manager, EGLE

Mr. Josh Mosher, EGLE – Remediation and Redevelopment Assistant Director

Mr. Dan Yordanich, EGLE

Ms. Mary Miller, EGLE

Mr. Darren Bowling, EGLE

Mr. Paul Owens, EGLE

Ms. Cheryl Wilson, EGLE

Ms. Lyndsey Hagy, EGLE

Ms. Katie Noetzel, EGLE

Attachment 1

ZF Monitoring Well Rehabilitation and Vertical Aquifer Profiling Work Plan

Work Plan



SUBJECT

Former Kelsey-Hayes Plant, 101 Oak Street Oakland County, Michigan EGLE Facility ID No. 63000952

DATE

April 22, 2022

DEPARTMENT

Environment

COPIES TO

Christian Wuerth, Village of Milford Mike Karll, Village of Milford

TO

Kevin Wojciechowski and Tiffany Yusko-Kotimko, Michigan Department of Environment, Great Lakes, And Energy

OUR REF

Monitoring Well Rehabilitation and Vertical Aquifer Profiling Work Plan

PROJECT NUMBER

30046730

OVERVIEW

On behalf of ZF Active Safety US Inc. (ZF), Arcadis of Michigan, LLC (Arcadis) has prepared this Monitoring Well Rehabilitation and Vertical Aquifer Profiling (VAP) Work Plan (Work Plan) to document proposed activities for the rehabilitation of Monitoring Well OW-16D2, VAP, and potential new well installation. This Work Plan was prepared pursuant to ZF's Letters to Michigan Department of Environment, Great Lakes, and Energy (EGLE) dated April 8, April 13 and April 15, 2022, and EGLE's letter to ZF dated April 14, 2022 and related email correspondence. This Work Plan describes the process for rehabilitating OW-16D2 (including possibly the introduction of an additive), conducting VAP, and possibly replacing OW-16D2.

The objective of these activities as mentioned in the above referenced correspondence is to ensure a properly performing and reliable monitoring well exists at or near the location of OW-16D2 that will provide groundwater data representative of conditions in the aquifer for comparison to Part 201 criteria and for determining whether the Administrative Order for Response Activity, EGLE Docket No. AO-RRD-22-001 was based on accurate prior data concerning the presence of vinyl chloride at that location. In addition, VAP (at three locations) will assess the lateral and vertical extent of groundwater impacts at and in the proximity of OW-16D2 and can be used to verify that the existing screen in OW-16D2 is in the zone of highest contamination and most representative of the impacted groundwater intended to be monitored by OW-16D2. The VAP can also be used if the rehabilitation of OW-16D2 does not meet the objectives set forth above and it is determined that replacement of OW-16D2 is necessary. See **Figures 1 and 2** for reference.

MONITORING WELL OW-16D2 REHABILITATION

Field activities associated with the rehabilitation of OW-16D2 will include:

- collecting water samples from OW-16D2 for chemical and biological analysis to determine if the recharging issues observed with the well are related to scaling or biofouling;
- performing a camera survey of the groundwater monitoring well to assess the integrity of the screen and the casing;
- performing a rising head/slug-out test to establish baseline well hydraulic performance;

• conducting redevelopment activities using a combination of surging, swabbing, airlifting, possibly the introduction of an approved additive, and removal of liquids from the well.

Sample Collection for Chemical and Biological Analysis

Water samples will be collected for chemical and biological analysis from OW-16D2 for a complete well profile. The samples will be submitted to Water System Engineering, Inc, (WSE) Ottawa, Kansas. The purpose of the sample is to collect data regarding biological and chemical factors (biofouling, scaling, etc.) that might contribute to the poor hydraulic connection of the current well to the aquifer. The data will be used to determine potential mechanical techniques and/or additives to remove a potential blockage from the well screen or maintain proper hydraulic connection of the well to the aquifer.

The water samples will be collected in two steps: The first sample will be collected from the water initially purged from the well (casing sample). After the first sample has been collected, the well will continue to be purged and the water quality will be monitored, using a multiparameter probe. The multiparameter probe will be used to measure field parameters (temperature, specific conductance, oxygen, pH, and Oxidation-Reduction Potential [ORP]) until they have stabilized within 10 percent, indicating that the well is drawing water from the formation. Once the readings indicate that formation water has entered the well, the second sample (well sample) will be collected. Unlike low-flow sampling, which requires the pump to be placed at the center of the screen, the pump will be placed approximately 5 to 10 feet above the well screen to collect the compete well profile. The pump rate will be up to 1,500 milliliters per minute.

The analysis of the samples will include: pH, alkalinity, bicarbonate, carbonates, chloride, total dissolved solids, conductivity, total hardness, calcium, magnesium, copper, iron, manganese, phosphate, nitrate, silica, sulfate, tannin, potassium, sodium, chlorine, ORP, Total Organic Carbon (TOC), Saturation Index calculation, Heterotrophic plate count, cell count made by adenosine triphosphate (ATP) method, bacterial identification of the two major populations, assessment of aerobic and anaerobic growth, sulfate reducing bacteria (SRB), iron oxidizing bacteria, total and E.coli coliform bacteria, and microscopic evaluation.

Monitoring Well Camera Survey

A down-well camera survey will be conducted to assess the integrity of OW-16D2. The survey will assess potential damage to the casing or the screen and will help determine if there is scaling or bioaccumulation in the well screen. The survey will be accomplished by lowering a camera down the well. Sections of the well with obvious defects or irregularities will be noted. A video recording of the camera survey will be created.

Assessment of Baseline Hydraulic Performance

A rising head/slug-out test will be conducted to establish baseline well performance using a disposable bailer. Field staff will use the following procedure for the test:

- 1. Measure depth to water and well total depth.
- 2. Total depth will be taken using a weighted tag line to determine the water column length. The "static" depth to water should be representative of the water level after the well equalizes with the atmosphere. Multiple depth to water measurements will be measured and any trends will be noted.
- 3. Review the well construction log to determine the screened interval and confirm the depth to the bottom. If discrepancies exist, the project hydrogeologist will be consulted.

- 4. Equip the well with a vented pressure transducer and program the instrument to read water level changes in 1-second intervals. Leave the laptop connected to the transducer during the test. If the transducer is not vented, install a barologger in the headspace of a nearby well to record barometric pressure.
- 5. Measure the bailer and rope assembly length and mark the rope at lengths as follows: Rope Mark #1 = Depth to Potentiometric Surface from TOC; Rope Mark #2 = Depth to Potentiometric Surface from TOC + Length of Bailer + Safety Factor (Safety Factor = ten percent (10%) of the Length of Bailer)
- 6. When deployed, Rope Mark #2 should ensure that the bailer is fully submerged. If a sufficient water column is not available to obtain a full bailer, measure the volume removed upon removal.
- 7. Slowly insert the bailer into the well and stop just above the potentiometric surface Rope Mark #1.
- 8. With slack in the rope and the bailer being suspended above the water column, lower the bailer and place the Rope Mark #2 at the top of casing. Clamp the non-bailer end of the rope to a static object to keep the rope in place.
- 9. Wait for the water level to equilibrate using a water level meter or observe using the transducer data displayed in real-time on the laptop computer.
- 10. Quickly remove the bailer from the water column and carefully pull it to the surface; start recording elapsed time once the bailer has been removed from the water column. Pour the removed water into an empty bucket.
- 11. Observe the water level response by measuring depth to water and observing water level changes on a laptop computer, if using a transducer. Allow sufficient time for the water level to recover to pre-test level (static). If completing one test, a recovery to 80% is sufficient.
- 12. With slow recovery, it is recommended to return to the well after a few days to observe recovery. The transducer will be retrieved once recovery has been achieved. The data will be downloaded and processed after the test.

The test will be performed before and after rehabilitation to evaluate the success of the rehabilitation measures.

Redevelopment of OW-16D2

Following the baseline well performance test, Arcadis will oversee the redevelopment of OW-16D2. Depending on the results of the chemical/biological analysis and camera survey, the redevelopment of OW-16D2 may include the introduction of Aqua-Clear®PFD and mechanical development techniques that will require the use of a water source. The Village of Milford water supply is the most readily available source of water and is proposed for this redevelopment work. If Aqua-Clear®PFD will be used, the date and time of the redevelopment will be coordinated with the Village of Milford to perform the work when its supply wells can be turned-off.

The well was redeveloped using surging/pumping technique on April 1, 2022. However, if additional sediment is found at the bottom of the well, which will be determined by comparing total depth measurements and review of the down well camera survey as described above, the material will be removed via air-lifting or pumping before beginning the next treatment step.

In a first step of the redevelopment process, a nylon brush appropriately sized for the well screen inner diameter (ID) will be used to brush two-foot sections of the screen at least 10 minutes (min) per section until the entire screen has been brushed. This process will be started at the top of the well screen and then continued downward to loosen/remove any biofilm, scaling, or fines that have accumulated on the well screen. After completion, the brush assembly will be removed, the well depth will be measured, and the presence of any sediment or loosened

materials in the bottom of well will be noted. As before, any sediment accumulated at the bottom of the well will be removed via bailer/air lift/pump before beginning the next redevelopment step. This step will be omitted if the review of the camera survey indicates that the well screen is free of scaling or bioaccumulation.

Upon consultation with EGLE and the Village of Milford, a commercially available mud dispersant (Aqua-Clear®PFD which is National Sanitation Foundation (NSF) / American National Standards Institute 60 certified) will be mixed with water following the manufacturer's directions for dosing and introduced into the screened interval. The water will come from the Village of Milford, as that is the nearest water source. Aqua-Clear®PFD is a common liquid polymer dispersant used in the water supply and environmental drilling industry. The material is classified as non-reactive and contains no hazardous substances above Occupational Safety and Health Administration cut-off values. The only ingredient contained in the NSF listing is sodium polyacrylate which is an approved Food and Drug Administration food additive and used in various medical applications. Copies of the NSF certification listing, manufacturer's information, and safety data sheet for Aqua-Clear® PFD are included in **Attachment 1**.

The mixture will be worked through the entire saturated screen interval by surging and brushing the screen for approximately 15 minutes. The dispersant will then be allowed to sit for approximately four hours before continuing well redevelopment activities.

The steps for mixing the dispersant are as follows:

- 1. Determine the volume of water in the screen area and double the calculated volume to account for water in the gravel pack and formation interface.
- 2. Once the water volume is determined, calculate the required volume of Aqua-Clear®PFD by using the following formula: Aqua-Clear®PFD (gal or L) = 0.002 x Water Volume (gal or L).
- 3. This equates to one gallon of Aqua-Clear®PFD for every 500 gallons of water (0.2% by volume) or 2.0 liters of Aqua-Clear®PFD for every cubic meter of water.
- 4. Mix thoroughly before introducing into well.
- 5. The preferable application method utilizes a tremie line with the product applied into the screened area.

After allowing the Aqua-Clear®PFD to sit for approximately four hours, mechanical redevelopment will start by lowering an appropriately sized double-surge block (or similar) into the well. Surging will start above the screen to reduce the possibility of "sand-locking" the surge block and will include the following:

- Initial surging will be done with a long stroke and at a slow rate (20 to 25 strokes per minute).
- After surging above the screen, the well will be cleaned by air-lifting.
- Surging will start at the lower end of the screen gradually working upward, surging in 2-foot intervals until the
 entire screen has been developed. The well will be surged for a minimum of 10 throws per 2-ft screen interval.

Each interval may require several surge cycles to achieve the best development. The entire length of well screen must be surged.

The surge block will be moved upward faster than downward to pull the fines out of the filter pack, instead of forcing them back in (and allowing for proper settlement).

During the surging, the total depth of the well will be measured periodically to ensure that excessive amounts of sediment are not being pulled through the screen. Any debris accumulated in the well will be removed via simultaneous airlifting (if a combined tool is available) or pumping.

4/6

A multiparameter probe will be used to measure field parameters from the redevelopment water including turbidity during redevelopment. Redevelopment (purging) will continue until turbidity is relatively stable (± 10%) and is visibly clear (ideally less than 10 nephelometric turbidity units).

Up to 10 well volumes of water, depending on well production following surging, will be removed from the well once surging has been completed. The extracted liquids will be containerized in totes or tanks and disposed of at the groundwater remediation system at the former Kelsey-Hayes site. The well redevelopment process outlined above will take approximately 8 hours.

Following the redevelopment of OW-16D2, a second hydraulic performance test will be conducted as outlined above. The result will determine if additional mechanical redevelopment will be necessary in the future or possibly plugging and replacement of OW-16D2.

VERTICAL AQUIFER PROFILING

VAP will be conducted at three locations near and west of OW-16D2 (see **Figure 2**) to determine the potential lateral and vertical extent of groundwater impacts. Prior to any intrusive work, the Village of Milford will be contacted for access and Miss Dig 811 will be informed about the activities and requested that utilities to be marked in the work area. In addition, a private utility locating service will be contracted to confirm the markings.

Soil cores will be logged and screened for evidence of volatile organic compounds using a Photo Ionization Detector (PID).

Groundwater samples will be collected at 10-foot intervals from the water table to a maximum depth of 130 feet below ground surface, or the surface of the clay underlaying the aquifer, using sonic drilling methods in combination with an inflatable packer system or a push ahead sampler to isolate the target sampling interval. Samples will be collected top-down, starting at the highest interval going down.

When the target sampling interval has been reached, the water between the packers will be evacuated prior to collecting the sample. After the sample has been collected, the packer will be retrieved and decontaminated. The boring will then be advanced to the next sampling interval and the process will be repeated.

After finalizing sample collection and when the final depth of the boring has been reached, the borehole will be abandoned by injecting a bentonite grout slurry. The grout will be injected starting at the bottom of the hole using a tremie pipe.

Soil cuttings will be containerized in 55-gallon Department of Transportation approved steel drums and temporarily stored near the groundwater treatment system building at the former Kelsey-Hayes Site for waste characterization prior to off-site disposal. All purge water will be disposed of in the groundwater treatment system at the former Kelsey-Hayes Site.

The groundwater samples will be submitted to Eurofins Laboratories and/or another lab for analysis of volatile organic compounds using USEPA Method SW-846 8260D.

The analytical results of the VAP sampling will be used to assess the lateral and vertical extent of groundwater impacts at and in the proximity of OW-16D2 and can be used to verify that the existing screen in OW-16D2 is in the zone of highest contamination and most representative of the impacted groundwater intended to be monitored by OW-16D2. The VAP can also be used if the rehabilitation of OW-16D2 does not meet the objectives set forth above and it is determined that replacement of OW-16D2 is necessary.

If the result of the redevelopment indicates that a replacement for OW-16D2 is necessary, a new 2-inch diameter monitoring well with a 5-foot stainless steel screen will be installed using sonic drilling methods. As described before, the well location and screen placement will be determined by the VAP results.

TARGET SCHEDULE

Arcadis will implement this Work Plan based on the following proposed schedule, pending weather conditions, site access, and EGLE approval of the Agua-Clear PFD® additive.

- Early May 2022 Biological and chemical sampling and camera survey of OW-16D2.
- May 2022 Hydraulic Performance testing, Redevelopment of OW-16D2.
- June 2022 VAP and potential well replacement.
- Continue groundwater monthly sampling at OW-16D2.
 - The last sample was collected on April 18, 2022
 - The next sample will be collected the week of May 16, 2022.

Enclosures: Figures and Attachments

Figures

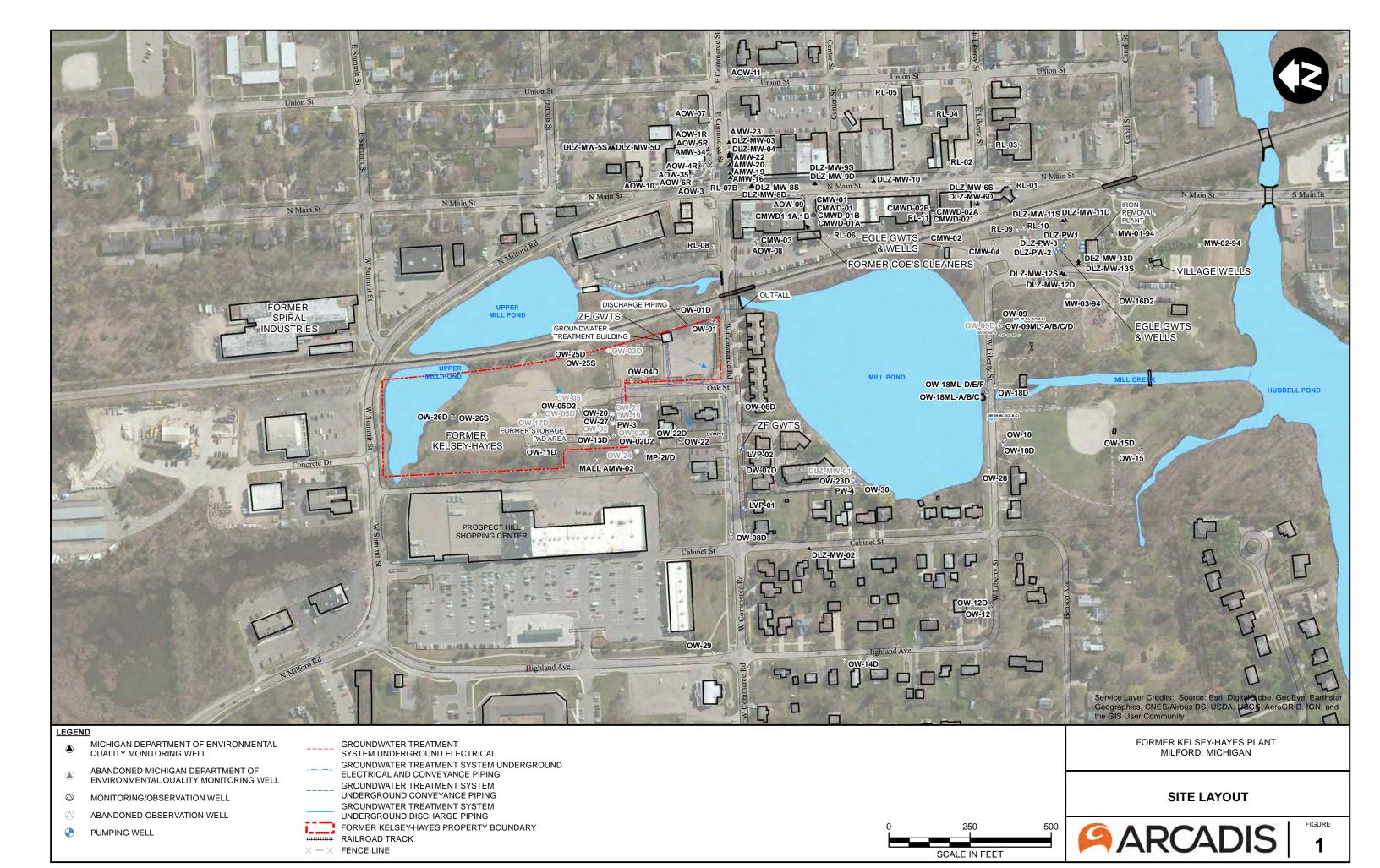
- 1 Site Layout Map
- 2 Site Layout Map with Proposed VAP Locations

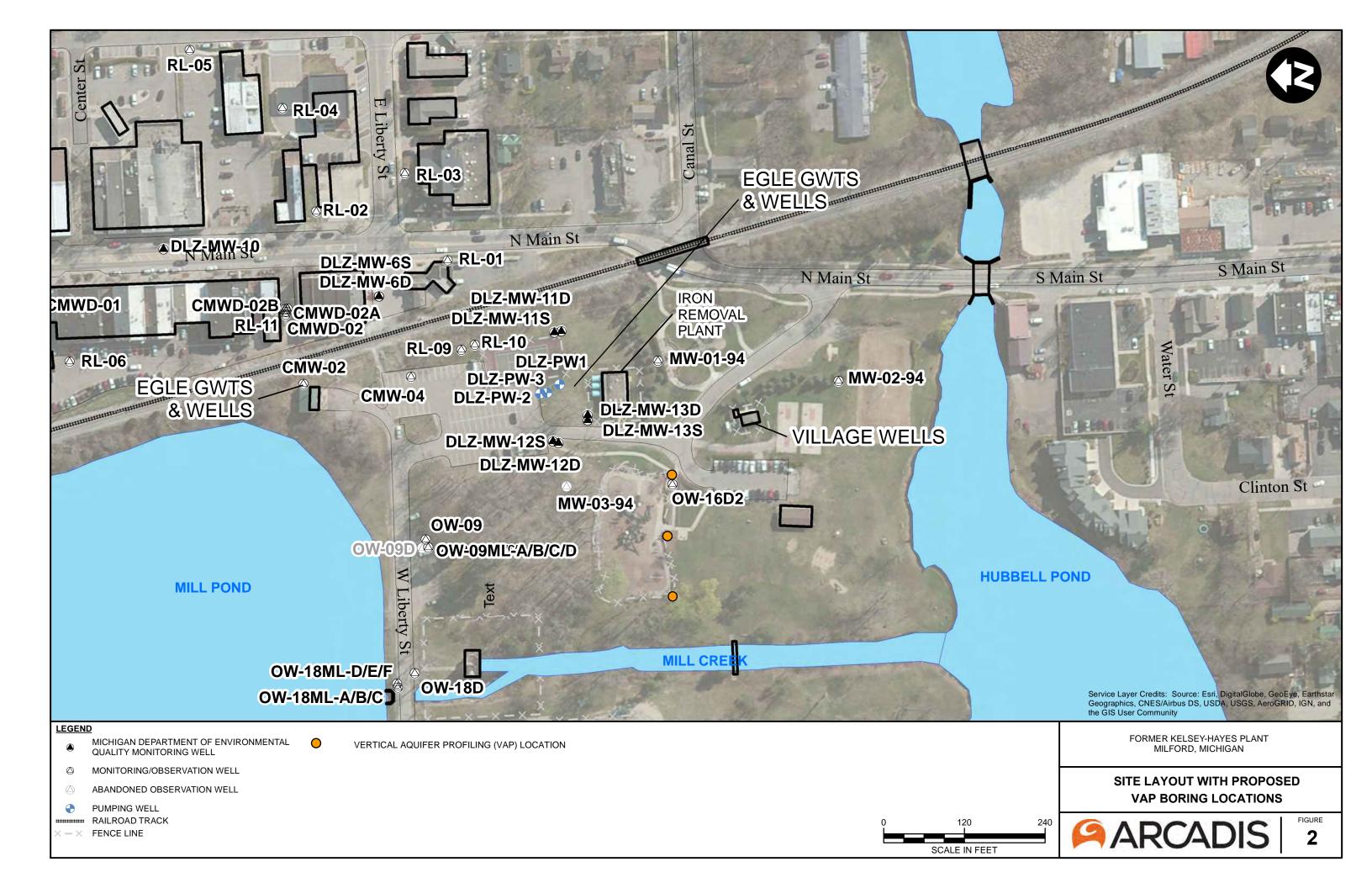
Attachment

1 - Product Information for Halliburton AQUA-CLEAR® PFD.

www.arcadis.com

Figures





Attachment 1

Product Information for Halliburton AQUA-CLEAR® PFD.



The Public Health and Safety Organization

NSF Product and Service Listings

These NSF Official Listings are current as of **Monday**, **April 04**, **2022** at 12:15 a.m. Eastern Time. Please contact NSF to confirm the status of any Listing, report errors, or make suggestions.

Alert: NSF is concerned about fraudulent downloading and manipulation of website text. Always confirm this information by clicking on the below link for the most accurate information: http://info.nsf.org/Certified/PwsChemicals/Listings.asp?Company=05240&Standard=060&

NSF/ANSI/CAN 60 Drinking Water Treatment Chemicals - Health Effects

Halliburton

3000 North Sam Houston Parkway East
Houston, TX 77032
United States
800-735-6075
281-871-4612
Visit this company's website (http://www.baroi

<u>Visit this company's website (http://www.baroididp.com)</u>

Facility: # 1 USA

Miscellaneous Water Supply Products[1]

Trade DesignationProduct FunctionMax Use $N-Seal^{TM}$ Drilling FluidNA

[1] These products are designed to be flushed out prior to using the system for drinking water. Before being placed in service, the well is to be properly flushed and drained according to the manufacturer's use instructions.

NOTE: All N-Seal™ from this location is NSF Certified, whether or not it bears the NSF Mark.

Facility: # 4 USA

Miscellaneous Water Supply Products

Trade Designation	Product Function	Max Use
$AQF-2^{TM}XG[1]$	Foaming Agent	NA
IDP-1004[1]	Foaming Agent	NA
IDP-1009[2]	Foaming Agent	NA
QUIK-FOAM® HP[2]	Foaming Agent	NA

- [1] Certification of this product is based on a well drilling model using assumptions stated in NSF/ANSI Standard 60, Section 8 for well drilling foamers.
- [2] Certification of this product is based on a well drilling model using assumptions stated in NSF/ANSI Standard 60, Section 8 for well drilling foamers.

Facility: # 7 USA

Miscellaneous Water Supply Products[1] [2]

Trade Designation	Product Function	Max Use
IDP-952	Well Sealant	NA
MAX-YIELD TCM	Well Sealant	NA

- [1] The sealant is to be mixed at a ratio of not greater than 36 pounds to 50 pounds of grout.
- [2] Certified for use as a well sealant additive only when used in conjunction with a well sealant grout.

Facility: #8 USA

Miscellaneous Water Supply Products[1]

Trade Designation	Product Function	Max Use
IDP-953	Well Sealant	NA
MAX-YIELD HP	Well Sealant	NA

[1] This product is designed to be flushed out until the turbidity of the water is <1 NTU. Flushing is required before the system may be used for drinking water.

Facility: Belle Fourche, SD

Bentonite[1]

Trade Designation	Product Function	Max Use
AQUAGEL®	Drilling Fluid	NA
AQUAGEL® GOLD SEAL	Drilling Fluid	NA
AQUAGUARD®	Well Sealant	NA
BAROTHERM® GOLD	Well Sealant	NA
BENSEAL®	Well Sealant	NA
BORE-GEL®	Drilling Fluid	NA
BORE-GROUT®	Well Sealant	NA
IDP-502	Well Sealant	NA
IDP-512	Well Drilling Aid	NA
QUIK-BORE	Well Drilling Aid	NA
QUIK-GEL GOLD®	Drilling Fluid	NA
QUIK-GEL®	Drilling Fluid	NA
QUIK-GROUT®	Well Sealant	NA

[1] This product is designed to be used off-line following manufacturer's use instructions. The well is to be flushed until the turbidity of the water is < 1 NTU before the system may be used for drinking water.

Miscellaneous Water Supply Products

Trade Designation	Product Function	Max Use
BARAD-399 CORE[2]	Drilling Fluid	NA
BARASORB 955	Well Sealant	NA
IDP-399[2]	Drilling Fluid	NA

- [2] These products are designed to be flushed out prior to using the system for drinking water. Before being placed into service, the well is to be properly flushed according to the manufacturer's use instructions. Certification of these products is based on the well drilling model with the following assumptions:
 - The amount of well drilling fluid used is 3780 L (1000 U.S. gallons) to which the drilling fluid has been added at the manufacturer's recommended level.
 - The aquifer contains 3.1 million liters of water (815,000 gallons) based on a 0.5 acre aquifer of 6.1 meter depth (20 ft.) and 25% porosity.
 - The bore hole is 61 meters in total depth (200 ft.), the screen is 6.1 meters in length (20 ft.), and the bore hole is 25.4 cm. in diameter (10 in.).
 - The amount of well drilling fluid removed from the well during construction is equal to the combined volumes of the casing and the screen, plus an additional amount removed through the well disinfection and development (90% removed).

- This product should not be used in constructing wells in highly porous formations, such as cavernous limestone.

NOTE: Only Listed products bearing the NSF Mark are NSF Certified.

Facility: Conroe, TX

Miscellaneous Water Supply Products

Trade Designation	Product Function	Max Use
BARAD-658[1] [2]	Other	NA
IDP-658[1] [2]	Other	NA
IDP-920[3]	Drilling Fluid	NA
	Well Drilling Aid	
PENETROL DRY[3]	Drilling Fluid	NA
	Well Drilling Aid	
QUIK-TROL® GOLD[4]	Well Drilling Aid	NA
QUIK-TROL® GOLD LV[1]	Well Drilling Aid	NA

- [1] This product is designed to be used off-line following manufacturer's use instructions. The well is to be flushed until the turbidity of the water is < 1 NTU before the system may be used for drinking water.
- [2] This product is Certified for use as a well sealant additive only when used in conjunction with a well sealant grout.
- [3] These products are designed to be flushed out prior to using the system for drinking water. Before being placed into service, the well is to be properly flushed according to the manufacturer's use instructions.
 - Certification of these products is based on the well drilling model with the following assumptions:
 - The amount of well drilling fluid used is 3780 L (1000 U.S. gallons) to which the drilling fluid has been added at the manufacturer's recommended level.
 - The aquifer contains 3.1 million liters of water (815,000 gallons) based on a 0.5 acre aquifer of 6.1 meter depth (20 ft.) and 25% porosity.
 - The bore hole is 61 meters in total depth (200 ft.), the screen is 6.1 meters in length (20 ft.), and the bore hole is 25.4 cm. in diameter (10 in.).
 - The amount of well drilling fluid removed from the well during construction is equal to the combined volumes of the casing and the screen, plus an additional amount removed through the well disinfection and development (90% removed).
 - This product should not be used in constructing wells in highly porous formations, such as cavernous limestone.
- [4] This product is designed to be used off-line following manufacturer's use instructions.

The well is to be flushed until the turbidity of the water is 1 NTU before the system may be used for drinking water.

Polyacrylamide[PC]

Trade Designation	Product Function	Max Use
POLY-BORE TM	Well Drilling Aid	NA

[PC] Polyacrylamide Products Certified by NSF International comply with 40 CFR 141.111 requirements for percent monomer and dose.

Polymer Blends[PC]

Trade Designation	Product Function	Max Use
Clay-Drill	Drilling Fluid	NA

[PC] Polyacrylamide Products Certified by NSF International comply with 40 CFR 141.111 requirements for percent monomer and dose.

Facility: Rosenberg, TX

Miscellaneous Water Supply Products

Trade Designation	Product Function	Max Use
AQF-2[1] [2]	Foaming Agent	NA
$AQF-2^{TM} XG[1]$	Foaming Agent	NA
AQUA-CLEAR® AE[3]	Well Rehabilitation Aid	NA
AQUA-CLEAR® MGA[3]	Well Rehabilitation Aid	NA
IDP-1004[1]	Foaming Agent	NA
IDP-1009[1]	Foaming Agent	NA
IDP-930[4] [5] [PC]	Drilling Fluid	NA
	Well Drilling Aid	
PENETROL DRY[2] [4] [5]	Drilling Fluid	NA
	Well Drilling Aid	
Performatrol 930[4] [5] [PC]	Drilling Fluid	NA
	Well Drilling Aid	
QUIK-FOAM® HP[1]	Foaming Agent	NA
QUIK-TROL®	Well Drilling Aid	NA
QUIK-TROL® GOLD[3]	Well Drilling Aid	NA
QUIK-TROL® GOLD LV[3]	Well Drilling Aid	NA
QUIK-TROL® LV	Well Drilling Aid	NA
Quik-Foam®[2]	Foaming Agent	NA

- [1] Certification of this product is based on a well drilling model using assumptions staed in NSF/ANSI/CAN 60, Section 8 for well drilling foamers.
- [2] This product is designed to be used off-line and flushed out prior to using the system for drinking water, following manufacturer's use instructions.
- [3] This product is designed to be used off-line following manufacturer's use instructions. The well is to be flushed until the turbidity of the water is < 1 NTU before the system may be used for drinking water.
- [4] These products are designed to be flushed out prior to using the system for drinking water. Before being placed into service, the well is to be properly flushed according to the manufacturer's use instructions.
- [5] Certification of these products is based on the well drilling model with the following assumptions:
 - The amount of well drilling fluid used is 3780 L (1000 U.S. gallons) to which the drilling fluid has been added at the manufacturer's recommended level.
 - The aquifer contains 3.1 million liters of water (815,000 gallons) based on a 0.5 acre aquifer of 6.1 meter depth (20 ft.) and 25% porosity.
 - The bore hole is 61 meters in total depth (200 ft.), the screen is 6.1 meters in length (20 ft.), and the bore hole is 25.4 cm. in diameter (10 in.).
 - The amount of well drilling fluid removed from the well during construction is equal to the combined volumes of the casing and the screen, plus an additional amount removed through the well disinfection and development (90% removed).
 - This product should not be used in constructing wells in highly porous formations, such as cavernous limestone.
- [PC] Polyacrylamide Products Certified by NSF International comply with 40 CFR 141.111 requirements for percent monomer and dose.

Polyacrylamide [PC]

Trade Designation	Product Function	Max Use
EZ-MUD GOLD[5] [PC] [WL]	Well Drilling Aid	NA
EZ-MUD®[5] [PC] [WL]	Well Drilling Aid	NA
EZ-MUD® DP[5] [PC] [WL]	Well Drilling Aid	NA
EZ-MUD® PLUS[5] [6] [PC] [WL]	Well Drilling Aid	NA
POLY-BORE TM [5] [PC] [WL]	Well Drilling Aid	NA

- [5] Certification of these products is based on the well drilling model with the following assumptions:
 - The amount of well drilling fluid used is 3780 L (1000 U.S. gallons) to which the drilling fluid has been added at the manufacturer's recommended level.
 - The aquifer contains 3.1 million liters of water (815,000 gallons) based on a 0.5 acre aquifer of 6.1 meter depth (20 ft.) and 25% porosity.
 - The bore hole is 61 meters in total depth (200 ft.), the screen is 6.1 meters in length (20 ft.), and the bore hole is 25.4 cm. in diameter (10 in.).

- The amount of well drilling fluid removed from the well during construction is equal to the combined volumes of the casing and the screen, plus an additional amount removed through the well disinfection and development (90% removed).
- This product should not be used in constructing wells in highly porous formations, such as cavernous limestone.
- [6] This product is designed for the treatment of surface water before it enters the water treatment facility.
- [PC] Polyacrylamide Products Certified by NSF International comply with 40 CFR 141.111 requirements for percent monomer and dose.
- [PC] Polyacrylamide Products Certified by NSF International comply with 40 CFR 141.111 requirements for percent monomer and dose.
- [WL] These products are designed to be flushed out prior to using the system for drinking

water. The well shall be properly flushed and drained before being placed in service.

Polyamines[PY]

Trade DesignationProduct FunctionMax UseSYSTEM-FLOC 360Coagulation & Flocculation10mg/L

[PY] Polyamines Certified by NSF International comply with 40 CFR 141.111 requirements for percent monomer and dose.

Polymer Blends[PY]

Trade DesignationProduct FunctionMax UseClay-DrillDrilling FluidNA

[PY] Polyamines Certified by NSF International comply with 40 CFR 141.111 requirements for percent monomer and dose.

Sodium Carbonate

Trade DesignationProduct FunctionMax UseSODA ASHpH Adjustment100mg/L

Sodium Polyacrylate

Trade DesignationProduct FunctionMax UseAQUA-CLEAR® PFD[2][4][5]Well Cleaning AidNA

- [2] This product is designed to be used off-line and flushed out prior to using the system for drinking water, following manufacturer's use instructions.
- [4] These products are designed to be flushed out prior to using the system for drinking water. Before being placed into service, the well is to be properly flushed according to

the manufacturer's use instructions.

- [5] Certification of these products is based on the well drilling model with the following assumptions:
 - The amount of well drilling fluid used is 3780 L (1000 U.S. gallons) to which the drilling fluid has been added at the manufacturer's recommended level.
 - The aquifer contains 3.1 million liters of water (815,000 gallons) based on a 0.5 acre aquifer of 6.1 meter depth (20 ft.) and 25% porosity.
 - The bore hole is 61 meters in total depth (200 ft.), the screen is 6.1 meters in length (20 ft.), and the bore hole is 25.4 cm. in diameter (10 in.).
 - The amount of well drilling fluid removed from the well during construction is equal to the combined volumes of the casing and the screen, plus an additional amount removed through the well disinfection and development (90% removed).
 - This product should not be used in constructing wells in highly porous formations, such as cavernous limestone.

Facility: Lovell, WY

Bentonite[1]

Trade Designation	Product Function	Max Use
AQUAGEL®	Drilling Fluid	NA
AQUAGEL® GOLD SEAL	Drilling Fluid	NA
BARA-KADE CHIPS	Well Sealant	NA
BORE-GEL®	Drilling Fluid	NA
CASING SEAL™	Well Sealant	NA
EZ-SEAL®	Well Sealant	NA
HOLEPLUG®	Well Sealant	NA
QUIK-GEL GOLD®	Drilling Fluid	NA
QUIK-GEL®	Drilling Fluid	NA

[1] This product is designed to be used off-line following manufacturer's use instructions. The well is to be flushed until the turbidity of the water is < 1 NTU before the system may be used for drinking water.

Number of matching Manufacturers is 1 Number of matching Products is 66

Processing time was o seconds



AQUA-CLEAR® PFD

Phosphate-Free Dispersant

Description

AQUA-CLEAR® PFD concentrated liquid polymer dispersant provides superior mud and sediment removal from the producing formation and gravel pack. This product is also a highly effective mud thinner. AQUA-CLEAR PFD dispersant contains no phosphates.

Applications/Functions

- Can disperse mud, sediment and clay from the producing formation and gravel pack in the screened interval.
- Can reduce viscosity and gel strength of drilling fluids

Advantages

- NSF/ANSI Standard 60 certified
- · Helps reduce development time
- · Helps increase well yield and capacity
- · Safe to use on most plastics, rubber and metals
- Non-fermenting
- Can reduce pumping costs

Typical Properties

Appearance straw colored liquid

Specific gravity 1.2 to 1.4
 pH (neat) 6.5 to 7.5

Recommended Treatment

As a Well Development Aid

- Determine volume of water in screen area and double the calculated volume to account for water in gravel pack and formation interface <u>or</u> determine the static volume of water and add 50% excess.
- Once the water volume is determined, calculate the required treatment volume of AQUA-CLEAR PFD by the following formula:

AQUA-CLEAR PFD (gal or L) = 0.002 x Water Volume (gal or L)

This equates to one gallon of AQUA-CLEAR PFD for every 500 gallons of water (0.2% by volume) or 2.0 liters of AQUA-CLEAR PFD for every cubic meter of water.

- Mix thoroughly before introducing into well.
- The preferable application method utilizes a tremie line with the product applied into the screened area.
- If necessary, the AQUA-CLEAR PFD/water solution may be poured into the well.
- Mixture should be thoroughly blended in well, then agitated using a surge

Recommended Treatment (continued)

and swab, jetting, or other developmental technique repeatedly every two hours for a period of up to 24 hours.

 Pump to waste until turbidity clears up and then connect well to distribution system.

As a Mud Thinner

Start by adding one pint of AQUA-CLEAR® PFD to 500 gallons of mud.
 Increase concentration until desired viscosity is achieved.

Well Capacity Chart (Gallons per Foot)					
Well Diameter (Inches)	Well Capacity in Gallons/ft	Well Diameter (Inches)	Well Capacity in Gallons/ft	Well Diameter (Inches)	Well Capacity in Gallons/ft
2	0.2	12	5.9	24	23.5
4	0.7	14	8.0	26	27.6
6	1.5	18	13.2	30	36.7
8	2.6	20	16.3	36	52.9
10	4.1	22	19.7	48	94.0

Well Capacity Chart (Liters per Meter)					
Well Diameter (millimeters)	Well Capacity Liters/meter	Well Diameter (millimeters)	Well Capacity Liters/meter	Well Diameter (millimeters)	Well Capacity Liters/meter
51	2.0	305	73.0	610	292.0
102	8.1	356	99.3	660	342.6
152	18.3	457	164.2	762	456.1
203	32.4	508	202.7	914	656.8
254	50.7	559	245.3	1219	1167.7

Note: The volumes in these tables show only the volume of water in a 1 foot or 1 meter section of a given size of screen. Excess volume must be included to account for water present in the formation interface and gravel pack.

Packaging

AQUA-CLEAR PFD is packaged in 50-lb (22.7-kg) or 25-kg (55-lb) plastic containers or in a case of 4, 1-gal (3.8 liter) plastic containers weighing 43-lbs (19.6-kg).

Availability

AQUA-CLEAR PFD can be purchased through any Baroid Industrial Drilling Products Retailer. To locate the Baroid IDP retailer nearest you contact the Customer Service Department in Houston or your area IDP Sales Representative.

Baroid Industrial Drilling Products Product Service Line, Halliburton

3000 N. Sam Houston Pkwy E. Houston, TX 77032

Customer Service	(800) 735-6075 Toll Free	(281) 871-4612
Technical Service	(877) 379-7412 Toll Free	(281) 871-4613

HALLIBURTON

SAFETY DATA SHEET

Product Trade Name: AQUA-CLEAR® PFD

Revision Date: 17-Feb-2016 Revision Number: 17

1. Identification

1.1. Product Identifier

Product Trade Name: AQUA-CLEAR® PFD

Synonyms None
Chemical Family: Blend
Internal ID Code HM004116

1.2 Recommended use and restrictions on use

Application: Additive

Uses advised against No information available

1.3 Manufacturer's Name and Contact Details

Manufacturer/Supplier Baroid Fluid Services

Product Service Line of Halliburton

P.O. Box 1675 Houston, TX 77251

Telephone: (281) 575-5000

Emergency Telephone: 1-866-519-4752 (US, Canada, Mexico) or 1-760-476-3962

Halliburton Energy Services 645 - 7th Ave SW Suite 2200

Calgary, AB T2P 4G8 Canada

Prepared By Chemical Stewardship

Telephone: 1-281-871-6107

e-mail: fdunexchem@halliburton.com

1.4. Emergency telephone number

Emergency Telephone Number 1-866-519-4752 or 1-760-476-3962

2. Hazard(s) Identification

2.1 Classification in accordance with paragraph (d) of §1910.1200

As adopted by the competent authority, this product does not require an SDS or hazard warning label.

Not classified

2.2. Label Elements

Hazard pictograms

Signal Word Not Classified

Hazard Statements Not Hazardous

Precautionary Statements

Prevention None

Response None

Storage None

Disposal None

2.3 Hazards not otherwise classified

None known

3. Composition/information on Ingredients

Substances	CAS Number	PERCENT (w/w)	GHS Classification - US
Contains no hazardous substances in concentrations above cut-off values	NA	60 - 100%	Not classified
according to the competent authority			

The exact percentage (concentration) of the composition has been withheld as proprietary.

4. First-Aid Measures

4.1. Description of first aid measures

Inhalation If inhaled, remove from area to fresh air. Get medical attention if respiratory

irritation develops or if breathing becomes difficult.

Eyes In case of contact, immediately flush eyes with plenty of water for at least 15

minutes and get medical attention if irritation persists.

Skin Wash with soap and water. Get medical attention if irritation persists. **Ingestion** Under normal conditions, first aid procedures are not required.

4.2 Most important symptoms/effects, acute and delayed

No significant hazards expected.

4.3. Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. Fire-fighting measures

5.1. Extinguishing media

Suitable Extinguishing Media

Water fog, carbon dioxide, foam, dry chemical.

Extinguishing media which must not be used for safety reasons

None known.

5.2 Specific hazards arising from the substance or mixture

Special exposure hazards in a fire

Decomposition in fire may produce harmful gases. Spills produce extremely slippery surfaces.

5.3 Special protective equipment and precautions for fire-fighters

Special protective equipment for firefighters

Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use appropriate protective equipment. Spills of this product are very slippery. Avoid contact with skin, eyes and clothing. Avoid breathing vapors. Ensure adequate ventilation.

See Section 8 for additional information

6.2. Environmental precautions

Prevent from entering sewers, waterways, or low areas.

6.3. Methods and material for containment and cleaning up

Isolate spill and stop leak where safe. Contain spill with sand or other inert materials. Scoop up and remove.

7. Handling and storage

7.1. Precautions for safe handling

Handling Precautions

Avoid contact with eyes, skin, or clothing. Wash hands after use. Avoid breathing vapors. Ensure adequate ventilation. Use appropriate protective equipment.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Information

Store away from oxidizers. Store in a cool, dry location. Product has a shelf life of 24 months.

8. Exposure Controls/Personal Protection

8.1 Occupational Exposure Limits

or occupational Expedie	Tr O T T T T T T T T T T T T T T T T T T						
Substances	CAS Number	OSHA PEL-TWA	ACGIH TLV-TWA				
Contains no hazardous	NA	Not applicable	Not applicable				
substances in concentrations							
above cut-off values according							
to the competent authority							

8.2 Appropriate engineering controls

Engineering Controls Use in a well ventilated area.

8.3 Individual protection measures, such as personal protective equipment

Personal Protective Equipment If engineering controls and work practices cannot prevent excessive exposures,

the selection and proper use of personal protective equipment should be

determined by an industrial hygienist or other qualified professional based on the

specific application of this product.

Respiratory Protection Not normally necessary.

Hand ProtectionImpervious rubber gloves.Skin ProtectionNormal work coveralls.

Eye Protection Safety glasses. Other Precautions None known.

9. Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Physical State: Liquid Color Yellowish

Odor: Slight Odor No information available

Threshold:

Property Values Remarks/ - Method

pH: 7 - 9

Freezing Point / Range
Melting Point / Range
No data available
Boiling Point / Range
No data available
No data available

Flash Point > 100 °C / > 212 °F Cleveland Open Cup (COC)

Flammability (solid, gas)
Upper flammability limit
Lower flammability limit
Evaporation rate
Vapor Pressure
Vapor Density
No data available
No data available
No data available
No data available
No data available

Specific Gravity 1.3

Water Solubility
Soluble in water
No data available
Partition coefficient: n-octanol/water
Autoignition Temperature
Decomposition Temperature
Viscosity
No data available
No data available
No data available
No data available
No data available
No data available
No data available

Explosive PropertiesNo information available **Oxidizing Properties**No information available

9.2. Other information

VOC Content (%) No data available

10. Stability and Reactivity

10.1. Reactivity

Not expected to be reactive.

10.2. Chemical stability

Stable

10.3. Possibility of hazardous reactions

Will Not Occur

10.4. Conditions to avoid

None anticipated

10.5. Incompatible materials

Strong oxidizers.

10.6. Hazardous decomposition products

Carbon monoxide and carbon dioxide.

11. Toxicological Information

11.1 Information on likely routes of exposure

Principle Route of Exposure Eye or skin contact, inhalation.

11.2 Symptoms related to the physical, chemical and toxicological characteristics

Acute Toxicity

Inhalation May cause mild respiratory irritation. **Eye Contact** May cause mild eye irritation.

Skin Contact Prolonged or repeated contact may cause slight skin irritation.

Ingestion Swallowing a relatively large amount of this material is unlikely to produce serious

illness or death.

Chronic Effects/Carcinogenicity No data available to indicate product or components present at greater than 0.1%

are chronic health hazards.

11.3 Toxicity data

Toxicology data for the components

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
Contains no hazardous substances in concentrations above cut-off values according to the competent	NA	No data available	No data available	No data available
authority				

12. Ecological Information

12.1. Toxicity Ecotoxicity effects

Product Ecotoxicity Data

No data available

Substance Ecotoxicity Data

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Toxicity to Invertebrates
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	No information available	No information available	No information available	No information available

12.2. Persistence and degradability

Substances	CAS Number	Persistence and Degradability
Contains no hazardous substances in	NA	No information available
concentrations above cut-off values according to		
the competent authority		

12.3. Bioaccumulative potential

Substances	CAS Number	Log Pow
Contains no hazardous substances in	NA	No information available
concentrations above cut-off values according to		
the competent authority		

12.4. Mobility in soil

Substances	CAS Number	Mobility
Contains no hazardous substances in concentrations	NA	No information available
above cut-off values according to the competent authority		

12.5 Other adverse effects

No information available

13. Disposal Considerations

13.1. Waste treatment methods

Disposal methodsDisposal should be made in accordance with federal, state, and local regulations.

Contaminated Packaging Follow all applicable national or local regulations.

14. Transport Information

US DOT

UN Number Not restricted
UN proper shipping name Not restricted
Transport Hazard Class(es) Not applicable
Packing Group: Not applicable
Environmental Hazards Not applicable

Canadian TDG

UN Number Not restricted
UN proper shipping name
Transport Hazard Class(es)
Packing Group: Not applicable
Environmental Hazards
Not restricted
Not restricted
Not applicable

IMDG/IMO

UN Number
UN proper shipping name
Transport Hazard Class(es)
Packing Group:
Not restricted
Not restricted
Not applicable
Not applicable
Not applicable

IATA/ICAO

UN Number Not restricted
UN proper shipping name
Transport Hazard Class(es)
Packing Group: Not applicable
Environmental Hazards
Not restricted
Not applicable
Not applicable

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable

Special Precautions for User None

15. Regulatory Information

US Regulations

US TSCA Inventory All components listed on inventory or are exempt.

TSCA Significant New Use Rules - S5A2

Substances	CAS Number	TSCA Significant New Use Rules - S5A2
Contains no hazardous substances in concentrations above cut-off values according to the competent	NA	Not applicable
authority		

EPA SARA Title III Extremely Hazardous Substances

Substances	CAS Number	EPA SARA Title III Extremely Hazardous
		Substances
Contains no hazardous substances in concentrations	NA	Not applicable
above cut-off values according to the competent		
authority		

EPA SARA (311,312) Hazard Class

None

EPA SARA (313) Chemicals

Substances	CAS Number	Toxic Release Inventory (TRI) -	Toxic Release Inventory (TRI) -
		Group I	Group II
Contains no hazardous substances in	NA	Not applicable	Not applicable
concentrations above cut-off values			
according to the competent authority			

EPA CERCLA/Superfund Reportable Spill Quantity

Substances	CAS Number	CERCLA RQ
Contains no hazardous substances in concentrations	NA	Not applicable
above cut-off values according to the competent		
authority		!

EPA RCRA Hazardous Waste Classification

If product becomes a waste, it does NOT meet the criteria of a hazardous waste as defined by the US EPA.

California Proposition 65 All components listed do not apply to the California Proposition 65 Regulation.

MA Right-to-Know Law Does not apply.

NJ Right-to-Know Law Does not apply.

PA Right-to-Know Law Does not apply.

NFPA Ratings: Health 1, Flammability 1, Reactivity 0

HMIS Ratings: Health 1, Flammability 0, Physical Hazard 0, PPE: B

Canadian Regulations

Canadian Domestic Substances All components listed on inventory or are exempt.

List (DSL)

16. Other information

Preparation Information

Prepared By Chemical Stewardship

Telephone: 1-281-871-6107

e-mail: fdunexchem@halliburton.com

Revision Date: 17-Feb-2016

Reason for Revision SDS sections updated:

7

Additional information

For additional information on the use of this product, contact your local Halliburton representative.

For questions about the Safety Data Sheet for this or other Halliburton products, contact Chemical Stewardship at 1-580-251-4335.

Key or legend to abbreviations and acronyms used in the safety data sheet

bw - body weight

CAS - Chemical Abstracts Service

EC50 - Effective Concentration 50%

ErC50 – Effective Concentration growth rate 50%

LC50 - Lethal Concentration 50%

LD50 - Lethal Dose 50%

LL50 – Lethal Loading 50%

mg/kg - milligram/kilogram

mg/L - milligram/liter

NIOSH - National Institute for Occupational Safety and Health

NTP - National Toxicology Program

OEL - Occupational Exposure Limit

PEL – Permissible Exposure Limit

ppm – parts per million

STEL - Short Term Exposure Limit

TWA - Time-Weighted Average

UN - United Nations

h - hour

mg/m³ - milligram/cubic meter

mm - millimeter

mmHg - millimeter mercury

w/w - weight/weight

d - day

Key literature references and sources for data

www.ChemADVISOR.com/

Disclaimer Statement

This information is furnished without warranty, expressed or implied, as to accuracy or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or in any process. Final determination of suitability of any material is the sole responsibility of the user.

End of Safety Data Sheet

ATTACHMENT 8

May 4, 2022 letter from EGLE15

GRETCHEN WHITMER

STATE OF MICHIGAN

DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY



WARREN DISTRICT OFFICE

May 4, 2022

Scott Detwiler ZF Active Safety US Inc. 11202 East Germann Road Mesa, Arizona 85212

Dear Scott Detwiler:

SUBJECT: EGLE Response to ZF Active Safety US Inc. (ZF's) Work Plan Related to

Monitoring Well Rehabilitation and Vertical Aquifer Profiling Regarding Former Kelsey-Hayes Company, 101 Oak Street, Milford, Oakland County, Michigan,

Facility ID No. 63000952.

The Michigan Department of Environment, Great Lakes, and Energy (EGLE), Remediation and Redevelopment Division (RRD) has received your letter on April 22, 2022, providing EGLE with ZF's Work Plan to rehabilitate monitoring well OW-16D2 and installation of three vertical aquifer profiling (VAP) borings.

The RRD has reviewed the Work Plan and has the following recommendations, questions, and concerns:

- The plan calls for a down-well camera survey before rehab activities are preformed but does not require a similar survey at other points such as after cleaning with a nylon brush or after the application of Aqua-Clear PFD. Comparison of the original survey to later surveys would be useful to inform next steps as well as revealing improvements in condition of the well or conditions which were not previously observable and could be a concern.
- Can any additional information be provided regarding what conditions from the well camera survey and chemical/biological results will trigger the use of Aqua-Clear PFD?
- Regarding the process for Aqua-Clear PFD:
 - The work plan states that following introduction of the solution the well will sit for 4 hours. However, the manufacturer recommendation is that the well should be agitated every 2 hours. Why is there a deviation from the manufacturer's recommendations?
 - o Will the water level in the well be monitored during this work?
 - o If there is insufficient recharge of the well, what measures will be taken to remove and rinse the solution out of the well/gravel pack/formation?
 - Has the manufacturer been contacted regarding potential reactions with vinyl chloride, cis-1,2-DCE, or other chlorinated and PFAS compounds?
- The zone of 'highest contamination" was not defined in EGLE's previous communication
 with ZF. The zone of "highest contamination" is defined by EGLE as the zone of the
 highest detected vinyl chloride, or if no vinyl chloride is detected, as the zone with the
 highest total volatile organic compounds (VOCs). In a scenario where the highest vinyl

- chloride detected is in a different zone than highest total VOCs, ZF should meet with EGLE to discuss the placement of the well screen(s).
- The stated maximum depth of VAP borings is 130-feet below grade or to the surface of the clay underlying the aquifer. The VAP borings should be advanced 5 feet into the clay that is encountered at the bottom of the aquifer.
- Slug tests, using a bailer methodology, are to be completed on OW-16D2. A pneumatic displacement method for this well would provide a greater displacement of water in OW-16D2 and therefore improved results. Use of a pneumatic slug test method is recommended.
- What is the reasoning for not collecting VOC samples during the chemical and biological analysis of monitoring well OW-16D2?
- Testing of two water samples mentions microscopic evaluations. What specific microscopic evaluations are to be completed?
- Testing is also being completed for total and E. coli coliform bacterial analysis. The monitoring well is not being disinfected, is bacterial analyses appropriate for OW-16D2?
- What is the reason the VAP drilling is not occurring until June?

If you have any questions regarding this matter, please contact me.

Sincerely,

Kevin Wojciechowski,

Senior Environmental Quality Analyst

Warren District Office

Remediation and Redevelopment Division

586-623-2948

WojciechowskiK@Michigan.gov

cc: Christian Wuerth, Village of Milford John McInnis, Arcadis Joost Vant Erve, DHHS Paul Owens, EGLE Cheryl Wilson, EGLE Darren Bowling, EGLE Lyndsey Hagy, EGLE Katie Noetzel, EGLE Tiffany Yusko-Kotimko, EGLE

ATTACHMENT 9

May 15, 2022 Letter from ZF

ZF Active Safety US Inc. 12001 Tech Center Drive, Livonia, Michigan 48150-2122



Department Environmental, Health & Safety
From Scott Detwiler
Phone 480-722-4139
Email scott.detwiler@zf.com
Date May 15, 2022

VIA E-MAIL TO: WojchiechowskiK@Michigan.gov

Kevin Wojciechowski, Project Manager Warren District Office Remediation and Redevelopment Division Michigan Department of Environment, Great Lakes, and Energy 27700 Donald Court Warren, Michigan 48092

RE: ZF Active Safety Systems Inc. (ZF) response to Michigan Department of Environment, Great Lakes, and Energy Comments Regarding ZF's Well Rehabilitation and Vertical Aquifer Profiling Work Plan submitted on April 22, 2022.

Dear Mr. Wojciechowski,

On May 4, 2022, the Department of Environment, Great Lakes, and Energy (EGLE) sent a response to ZF Active Safety Systems Inc. ("EGLE's May 4th Letter") regarding the Well Rehabilitation and Vertical Aquifer Profiling Work Plan submitted by ZF on April 22, 2022 (the "Work Plan"). The Work Plan was submitted by ZF in connection with EGLE's April 14, 2022 Letter in Response to Additional Information for Consideration Related to the Administrative Order for Response Activity, EGLE Docket No. AO-RRD-22-001 ("EGLE's April 14th Letter"). The purpose of this letter is to provide a response to each of the recommendations, comments, or questions included in EGLE's May 4th Letter.

1) EGLE Comment/Recommendation No. 1:

The plan calls for a down-well camera survey before rehab activities are preformed but does not require a similar survey at other points such as after cleaning with a nylon brush or after the application of Aqua-Clear® PFD. Comparison of the original survey to later surveys would be useful to inform next steps as well as revealing improvements in condition of the well or conditions which were not previously observable and could be a concern.

ZF Response:

ZF/Arcadis plans to have a down-well camera onsite during the Monitoring Well OW-16D2 rehabilitation activities and intends to conduct periodic surveys of the well during and after well rehabilitation. ZF/Arcadis will also document the conditions of the well before and after significant steps in the rehabilitation process. ZF/Arcadis will perform a down-well camera survey after the well has been cleaned and, if applicable, after the injection of the Aqua-Clear® PFD. As noted in the work plan, a video recording of each of the down-well camera surveys will be created.

2) EGLE Comment/Recommendation No. 2:

Can any additional information be provided regarding what conditions from the well camera survey and chemical/biological results will trigger the use of Aqua-Clear® PFD?

ZF Response:

As indicated in the Work Plan, the chemical/biological sampling results will be used to assess biological and chemical factors (biofouling, scaling, etc.) for a complete well profile and the downwell camera survey will assess potential damage to the casing or the screen and will help determine if there is scaling, bioaccumulation on the well screen. If the results of the chemical/biological analysis and camera survey indicated that the poor hydraulic connection of OW-16D2 to the aquifer is likely related to mineral scaling/biofouling or deterioration of the well casing and/or screen, the use of Aqua-Clear®PFD would not be recommended and only mechanical redevelopment techniques including a combination of surging, swabbing, brushing and sediment removal via bailing, air lifting, and/or pumping would be utilized to address the condition of the well. However, the use of Aqua-Clear®PFD would be recommended if the poor hydraulic connection of OW-16D2 to the aquifer appears to be related to sediment and clay plugging the well screen/formation. The microscopic evaluation, which is part of the chemical/biological analysis, can help identify the types of sediment (clay/silt/sand) present in a sample and therefore, verify if the use of Aqua-Clear®PFD is appropriate and further guide recommendations on concentration and number of applications.

3) EGLE Comment/Recommendation No. 3:

Regarding the process for Aqua-Clear PFD:

- A. The work plan states that following introduction of the solution the well will sit for 4 hours. However, the manufacturer recommendation is that the well should be agitated every 2 hours. Why is there a deviation from the manufacturer's recommendations?
- B. Will the water level in the well be monitored during this work?
- C. If there is insufficient recharge of the well, what measures will be taken to remove and rinse the solution out of the well/gravel pack/formation?
- D. Has the manufacturer been contacted regarding potential reactions with vinyl chloride, cis-1,2-DCE, or other chlorinated and PFAS compounds?

ZF Response:

A. During the initial redevelopment of OW-16D2 that was conducted on April 1, 2022, most of the water was removed from the well during the process and recovery of groundwater into the well was very slow. Because this initial surging did not significantly improve the hydraulic connection of the well to the aquifer, Arcadis's senior hydrogeologist recommended that the Aqua-Clear®PFD sit for approximately 4 hours to provide time for the dispersant to react with the sediment before conducting surging. The manufacturer's recommendations also specify a longer treatment time (up to 24 hours) for mud rotary well installation to disperse drilling mud introduced during the drilling process. OW-16D2 was installed using hollow-stem auger drilling methods without the use of drilling mud. However, the Village of Milford has requested that ZF/Arcadis complete the work on OW-16D2 in less than 8 hours, between 10:00pm and 6:00 am. Therefore, given the slow recovery of OW-16D2 at the time of the initial well rehabilitation work and the time limits on conducting the work, ZF/Arcadis believes that 4

hours is the minimum amount of time necessary to allow the Aqua-Clear®PFD to react with any sediment that is present and then begin surging. However, if EGLE would prefer that the well be agitated every 2 hours per the manufacturer's recommendation, ZF/Arcadis will implement that procedure.

- B. ZF/Arcadis plans to monitor the water level in the well during the well rehabilitation process. The water level will also be measured before starting the work to rehabilitate OW-16D2 and after the rehabilitation work is completed.
- C. According to the manufacturer's specifications and instructions, a well that has been treated with Aqua-Clear®PFD is considered purged of the additive when the water is clear and there is no turbidity. ZF/Arcadis proposes to surge the well and extract the water, while measuring turbidity and field parameters using a multiparameter instrument and a stand-alone turbidity meter. If the recharge is insufficient, redevelopment will be completed in surge and re-charge cycles until the turbidity clears up to pre-additive measurements.
- D. Arcadis contacted the manufacturer regarding potential reactions of Aqua-Clear®PFD with chlorinated volatile organic compounds (VOCs) and per- and polyfluoroalkyl substances (PFAS). The manufacturer indicated that they do not expect any reactions with chlorinated VOCs or PFAS and also stated that Aqua-Clear®PFD is a dispersant and only reacts with mud, sediment, and clay.

4) EGLE Comment/Recommendation No. 4:

The zone of 'highest contamination" was not defined in EGLE's previous communication with ZF. The zone of "highest contamination" is defined by EGLE as the zone of the highest detected vinyl chloride, or if no vinyl chloride is detected, as the zone with the highest total VOCs. In a scenario where the highest vinyl chloride detected is in a different zone than highest total VOCs, ZF should meet with EGLE to discuss the placement of the well screen(s).

ZF Response:

Regarding the vertical aquifer profiling (VAP) work, ZF acknowledges and accepts EGLE's definition of "zone of highest contamination" to be the zone of the highest detected vinyl chloride, or if no vinyl chloride is detected, as the zone with the highest total VOCs. If the highest concentration of vinyl chloride detected is in a different zone than the highest total VOCs, ZF will contact EGLE to discuss the placement of well screen(s).

5) EGLE Comment/Recommendation No. 5:

The stated maximum depth of VAP borings is 130-feet below grade or to the surface of the clay underlying the aquifer. The VAP borings should be advanced 5 feet into the clay that is encountered at the bottom of the aquifer.

ZF Response:

ZF acknowledges and accepts EGLE's request and will attempt to advance the VAP borings to 5 feet onto the clay that is encountered at the bottom of the aquifer.

6) EGLE Comment/Recommendation No. 6:

Slug tests, using a bailer methodology, are to be completed on OW-16D2. A pneumatic displacement method for this well would provide a greater displacement of water in OW-16D2 and therefore improved results. Use of a pneumatic slug test method is recommended.

ZF Response:

ZF acknowledges EGLE's recommendation of using a pneumatic displacement method for slug tests at OW-16D2. Although an initial slug test was completed using the bailer methodology, ZF will use a pneumatic slug test method for future testing at OW-16D2.

7) EGLE Comment/Recommendation No. 7:

What is the reasoning for not collecting VOC samples during the chemical and biological analysis of monitoring well OW-16D2?

ZF Response:

The sampling procedures for the chemical and biological analysis do not meet the requirements for low-flow sampling that are required for collecting samples for VOC analysis. In addition, VOC samples were collected from OW-16D2 in April, will be collected again in May, and monthly thereafter, using the low-flow sampling techniques.

8) EGLE Comment/Recommendation No. 8:

Testing of two water samples mentions microscopic evaluations. What specific microscopic evaluations are to be completed?

ZF Response:

The microscopic evaluations include examination of a portion of the water samples (centrifuged to concentrate sediment) using a compound microscope at different magnifications from 100x to 1,000x. As indicated above, the microscopic evaluation, which is part of the chemical/biological analysis can help identify the types of sediment (clay/silt/sand) present in the sample and approximate particle sizing. This evaluation is also useful for identification of the types of bacterial activity (e.g., iron-oxidizing and/or sulfur reducing), scale accumulation (e.g., presence of calcium carbonate), formation influence, and corrosion by-products. The microscopic evaluation is also used to corroborate findings of the chemical/biological laboratory analysis such as oxidation-reduction potential.

9) EGLE Comment/Recommendation No. 9:

Testing is also being completed for total and E. coli coliform bacterial analysis. The monitoring well is not being disinfected, is bacterial analyses appropriate for OW-16D2?

ZF Response:

Total and E. coli coliform bacterial analysis are included in the complete well profile under the chemical/biological analysis, hence it was listed in the Work Plan. However, since OW-16D2 is not a potable water source, this testing is not necessary and will not be included in the analysis.

10) EGLE Comment/Recommendation No. 10:

What is the reason the VAP drilling is not occurring until June?

ZF Response:

The schedule for the VAP drilling is based on the availability of drilling companies. ZF/Arcadis would like to conduct the VAP work as soon as possible and have asked the drilling company to notify us if there are any openings in their schedule prior to June. Recent discussions indicate that the VAP work could start in May. However, this will also be dependent on coordination with the Village of Milford, as certain areas of Milford's Central Park will need to be closed-off during the performance of the work.

The Work Plan outlines the activities that ZF will perform to further investigate and rehabilitate Monitoring Well OW-16D2, conduct VAP, and potentially replace Monitoring Well OW-16D2 with a new well. In consideration of EGLE's comments and recommendations for the Work Plan, ZF's responses contained in this letter, and further discussions with EGLE, the Work Plan will be updated accordingly and resubmitted to EGLE.

Thank you for your attention to these matters and please include this letter in the administrative record for the AO and the Site.

If you have any questions, please contact me at the phone number listed in the header on the first page of this letter, Mr. Robert Bleazard – ZF Sr. EHS Manager, Environmental Remediation at 480-722-4866, or Mr. John McInnis of Arcadis at 248-994-2285.

Sincerely,

Scott Detwiler

Sr. Regional Manager

Sold State

ZF Environmental, Health and Safety

cc: Christian Wuerth, Village of Milford
John McInnis, Arcadis
Joost Vant Erve, DHHS
Paul Owens, EGLE
Cheryl Wilson, EGLE
Darren Bowling, EGLE
Lyndsey Hagy, EGLE
Katie Noetzel, EGLE
Tiffany Yusko-Kotimko, EGLE

ATTACHMENT 10

Laboratory Analytical Reports (Observation Well OW-16D2)

ANALYTICAL REPORT

Eurofins Canton 180 S. Van Buren Avenue Barberton, OH 44203 Tel: (330)497-9396

Laboratory Job ID: 240-164584-1

Client Project/Site: Milford

For:

ZF Active Safety and Electronics LLC Tech 2 12025 Tech Center Drive Livonia, Michigan 48150

Attn: Scott Detwiler

Ade Del Your

Authorized for release by: 4/13/2022 2:44:35 PM

Michael DelMonico, Project Manager I (330)497-9396

Michael.DelMonico@et.eurofinsus.com

LINKS

Review your project results through Total Access

Have a Question?



Visit us at:

www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ZF Active Safety and Electronics LLC

Job ID: 240-164584-1 Project/Site: Milford

Qualifiers

GC/MS VOA

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.

Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery **CFL** Contains Free Liquid CFU Colony Forming Unit CNF Contains No Free Liquid

Duplicate Error Ratio (normalized absolute difference) **DER**

Dil Fac **Dilution Factor**

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

Estimated Detection Limit (Dioxin) **EDL** LOD Limit of Detection (DoD/DOE) LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level" MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit MLMinimum Level (Dioxin) MPN Most Probable Number Method Quantitation Limit MQL

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive QC **Quality Control**

Relative Error Ratio (Radiochemistry) **RER**

Reporting Limit or Requested Limit (Radiochemistry) RL

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin) **TEQ** Toxicity Equivalent Quotient (Dioxin)

Too Numerous To Count **TNTC**

Eurofins Canton

Case Narrative

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Job ID: 240-164584-1

Job ID: 240-164584-1

Laboratory: Eurofins Canton

Narrative

ob Narrative 240-164584-1

Comments

No additional comments.

Receipt

The samples were received on 4/6/2022 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.9° C.

GC/MS VOA

Method 8260B: The continuing calibration verification (CCV) associated with batch 240-522044 recovered above the upper control limit for Acetone. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported. The associated samples are impacted: OW-16D2_040422 (240-164584-1), EQUIPMENT BLANK_040422 (240-164584-2), FIELD BLANK_040422 (240-164584-3), TRIP BLANK (240-164584-4), (CCV 240-522044/4), (CCVIS 240-522044/3), (LCS 240-522044/5), (LCS 240-522044/6), (MB 240-522044/9), (240-164634-B-3), (240-164634-B-3 MS) and (240-164634-B-3 MSD).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep

No additional analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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Method Summary

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Job ID: 240-164584-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
5030B	Purge and Trap	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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Sample Summary

Client: ZF Active Safety and Electronics LLC

FIELD BLANK_040422

TRIP BLANK

Project/Site: Milford

240-164584-3

240-164584-4

 Lab Sample ID
 Client Sample ID
 Matrix
 Collected
 Received

 240-164584-1
 OW-16D2_040422
 Water
 04/04/22 11:55
 04/06/22 08:00

 240-164584-2
 EQUIPMENT BLANK_040422
 Water
 04/04/22 12:10
 04/06/22 08:00

Water

Water

04/04/22 11:45 04/06/22 08:00

04/04/22 00:00 04/06/22 08:00

1

Job ID: 240-164584-1

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Detection Summary

Client: ZF Active Safety and Electronics LLC Job ID: 240-164584-1

Project/Site: Milford

Client Sample ID: OW-16D2_040422	Lab Sample ID: 240-164584-1

Analyte	Result Qualifier	RL	Unit	Dil Fac	Method	Prep Type
1,1-Dichloroethane	3.8	1.0	ug/L		8260B	Total/NA
cis-1,2-Dichloroethene	21	1.0	ug/L	1	8260B	Total/NA
trans-1,2-Dichloroethene	1.7	1.0	ug/L	1	8260B	Total/NA

No Detections.

Client Sample ID: FIELD BLANK_040422 Lab Sample ID: 240-164584-3

No Detections.

Client Sample ID: TRIP BLANK Lab Sample ID: 240-164584-4

No Detections.

Job ID: 240-164584-1 Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

4-Bromofluorobenzene (Surr)

Toluene-d8 (Surr)

Client Sample ID: OW-16D2_040422

Lab Sample ID: 240-164584-1 Date Collected: 04/04/22 11:55

Matrix: Water

Date Received: 04/06/22 08:00

Analyte	Result	Qualifier	RL	Unit	D Prepared	Analyzed	Dil Fa
Acetone	10	U	10	ug/L		04/07/22 17:02	
Benzene	1.0	U	1.0	ug/L		04/07/22 17:02	
Bromodichloromethane	1.0	U	1.0	ug/L		04/07/22 17:02	
Bromoform	1.0	U	1.0	ug/L		04/07/22 17:02	
Bromomethane	1.0	U	1.0	ug/L		04/07/22 17:02	
2-Butanone (MEK)	10	U	10	ug/L		04/07/22 17:02	
Carbon disulfide	1.0	Ü	1.0	ug/L		04/07/22 17:02	
Carbon tetrachloride	1.0		1.0	ug/L		04/07/22 17:02	
Chlorobenzene	1.0		1.0	ug/L		04/07/22 17:02	
Chloroethane	1.0		1.0	ug/L		04/07/22 17:02	
Chloroform	1.0		1.0	ug/L		04/07/22 17:02	
Chloromethane	1.0		1.0	ug/L		04/07/22 17:02	
			1.0			04/07/22 17:02	
1,1-Dichloroethane 1,2-Dichloroethane	3.8 1.0	11	1.0	ug/L		04/07/22 17:02	
,	1.0		1.0	ug/L		04/07/22 17:02	
1,1-Dichloroethene				ug/L			
1,2-Dichloropropane	1.0		1.0	ug/L		04/07/22 17:02	
cis-1,3-Dichloropropene	1.0		1.0	ug/L		04/07/22 17:02	
trans-1,3-Dichloropropene	1.0		1.0	ug/L		04/07/22 17:02	
Ethylbenzene	1.0		1.0	ug/L		04/07/22 17:02	
2-Hexanone	10		10	ug/L		04/07/22 17:02	
Methylene Chloride	5.0		5.0	ug/L		04/07/22 17:02	
4-Methyl-2-pentanone (MIBK)	10	U	10	ug/L		04/07/22 17:02	
Styrene	1.0	U	1.0	ug/L		04/07/22 17:02	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	ug/L		04/07/22 17:02	
Tetrachloroethene	1.0	U	1.0	ug/L		04/07/22 17:02	
Toluene	1.0	U	1.0	ug/L		04/07/22 17:02	
Trichloroethene	1.0	U	1.0	ug/L		04/07/22 17:02	
Vinyl chloride	1.0	U	1.0	ug/L		04/07/22 17:02	
Xylenes, Total	2.0	U	2.0	ug/L		04/07/22 17:02	
1,1,1-Trichloroethane	1.0	U	1.0	ug/L		04/07/22 17:02	
1,1,2-Trichloroethane	1.0	U	1.0	ug/L		04/07/22 17:02	
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	ug/L		04/07/22 17:02	
1.2-Dibromoethane	1.0	U	1.0	ug/L		04/07/22 17:02	
) Dichlorodifluoromethane	1.0	Ü	1.0	ug/L		04/07/22 17:02	
cis-1,2-Dichloroethene	21		1.0	ug/L		04/07/22 17:02	
trans-1,2-Dichloroethene	1.7		1.0	ug/L		04/07/22 17:02	
sopropylbenzene	1.0		1.0	ug/L		04/07/22 17:02	
Methyl tert-butyl ether	1.0		1.0	ug/L		04/07/22 17:02	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0		1.0	ug/L		04/07/22 17:02	
	1.0					04/07/22 17:02	
1,2,4-Trichlorobenzene			1.0	ug/L			
1,2-Dichlorobenzene	1.0		1.0	ug/L		04/07/22 17:02	
1,3-Dichlorobenzene	1.0		1.0	ug/L		04/07/22 17:02	
1,4-Dichlorobenzene	1.0		1.0	ug/L		04/07/22 17:02	
Trichlorofluoromethane	1.0		1.0	ug/L		04/07/22 17:02	
Dibromochloromethane	1.0	U	1.0	ug/L		04/07/22 17:02	
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4 (Surr)	105		62 - 137		·	04/07/22 17:02	
						04/07/00 17 55	

Eurofins Canton

4/13/2022

04/07/22 17:02

04/07/22 17:02

Page 8 of 24

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85

Client: ZF Active Safety and Electronics LLC Job ID: 240-164584-1

Project/Site: Milford

Date Received: 04/06/22 08:00

Client Sample ID: OW-16D2_040422 Lab Sample ID: 240-164584-1

Date Collected: 04/04/22 11:55 **Matrix: Water**

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

%Recovery Qualifier Limits Prepared Analyzed Dil Fac Dibromofluoromethane (Surr) 93 73 - 120 04/07/22 17:02

Client: ZF Active Safety and Electronics LLC Job ID: 240-164584-1

Project/Site: Milford

Toluene-d8 (Surr)

Client Sample ID: EQUIPMENT BLANK_040422

Date Collected: 04/04/22 12:10 Date Received: 04/06/22 08:00 Lab Sample ID: 240-164584-2

Matrix: Water

Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	ug/L			04/07/22 15:21	1
Benzene	1.0	U	1.0	ug/L			04/07/22 15:21	1
Bromodichloromethane	1.0	U	1.0	ug/L			04/07/22 15:21	1
Bromoform	1.0	U	1.0	ug/L			04/07/22 15:21	1
Bromomethane	1.0	U	1.0	ug/L			04/07/22 15:21	1
2-Butanone (MEK)	10	U	10	ug/L			04/07/22 15:21	1
Carbon disulfide	1.0	U	1.0	ug/L			04/07/22 15:21	1
Carbon tetrachloride	1.0	U	1.0	ug/L			04/07/22 15:21	1
Chlorobenzene	1.0	U	1.0	ug/L			04/07/22 15:21	1
Chloroethane	1.0	U	1.0	ug/L			04/07/22 15:21	1
Chloroform	1.0	U	1.0	ug/L			04/07/22 15:21	1
Chloromethane	1.0	U	1.0	ug/L			04/07/22 15:21	1
1,1-Dichloroethane	1.0	U	1.0	ug/L			04/07/22 15:21	1
1,2-Dichloroethane	1.0	U	1.0	ug/L			04/07/22 15:21	1
1,1-Dichloroethene	1.0	U	1.0	ug/L			04/07/22 15:21	1
1,2-Dichloropropane	1.0	U	1.0	ug/L			04/07/22 15:21	1
cis-1,3-Dichloropropene	1.0	U	1.0	ug/L			04/07/22 15:21	1
trans-1,3-Dichloropropene	1.0	U	1.0	ug/L			04/07/22 15:21	1
Ethylbenzene	1.0		1.0	ug/L			04/07/22 15:21	1
2-Hexanone	10	U	10	ug/L			04/07/22 15:21	1
Methylene Chloride	5.0	U	5.0	ug/L			04/07/22 15:21	1
4-Methyl-2-pentanone (MIBK)	10		10	ug/L			04/07/22 15:21	1
Styrene	1.0		1.0	ug/L			04/07/22 15:21	1
1,1,2,2-Tetrachloroethane	1.0		1.0	ug/L			04/07/22 15:21	1
Tetrachloroethene	1.0		1.0	ug/L			04/07/22 15:21	1
Toluene	1.0		1.0	ug/L			04/07/22 15:21	1
Trichloroethene	1.0		1.0	ug/L			04/07/22 15:21	1
Vinyl chloride	1.0		1.0	ug/L			04/07/22 15:21	
Xylenes, Total	2.0		2.0	ug/L			04/07/22 15:21	1
1,1,1-Trichloroethane	1.0		1.0	ug/L			04/07/22 15:21	1
1,1,2-Trichloroethane	1.0		1.0	ug/L			04/07/22 15:21	· · · · · · · 1
1,2-Dibromo-3-Chloropropane	2.0		2.0	ug/L			04/07/22 15:21	1
1,2-Dibromoethane	1.0		1.0	ug/L			04/07/22 15:21	1
Dichlorodifluoromethane	1.0		1.0	ug/L			04/07/22 15:21	· · · · · · · 1
cis-1,2-Dichloroethene	1.0		1.0	ug/L			04/07/22 15:21	1
trans-1,2-Dichloroethene	1.0		1.0	ug/L			04/07/22 15:21	1
Isopropylbenzene	1.0		1.0	ug/L			04/07/22 15:21	· · · · · · · · · · · · · · · · · · ·
Methyl tert-butyl ether	1.0		1.0	ug/L			04/07/22 15:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0		1.0	ug/L			04/07/22 15:21	1
1,2,4-Trichlorobenzene	1.0		1.0	ug/L ug/L			04/07/22 15:21	
1,2-Dichlorobenzene	1.0		1.0	ug/L			04/07/22 15:21	1
1,3-Dichlorobenzene	1.0		1.0	ug/L			04/07/22 15:21	1
1,4-Dichlorobenzene	1.0		1.0	ug/L			04/07/22 15:21	
Trichlorofluoromethane	1.0		1.0	ug/L ug/L			04/07/22 15:21	1
Dibromochloromethane	1.0		1.0	ug/L			04/07/22 15:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		62 - 137		-	-	04/07/22 15:21	1
4-Bromofluorobenzene (Surr)	87		56 - 136				04/07/22 15:21	1
-,,			70 400				04/07/00 45 04	

Eurofins Canton

04/07/22 15:21

78 - 122

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Client: ZF Active Safety and Electronics LLC Job ID: 240-164584-1

Project/Site: Milford

Date Received: 04/06/22 08:00

Client Sample ID: EQUIPMENT BLANK_040422 Lab Sample ID: 240-164584-2

Date Collected: 04/04/22 12:10

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

%Recovery Qualifier Limits Prepared Analyzed Dil Fac Dibromofluoromethane (Surr) 90 73 - 120 04/07/22 15:21

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Toluene-d8 (Surr)

Client Sample ID: FIELD BLANK_040422

Date Collected: 04/04/22 11:45 Date Received: 04/06/22 08:00 Lab Sample ID: 240-164584-3

Matrix: Water

Job ID: 240-164584-1

Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	ug/L			04/07/22 15:46	1
Benzene	1.0	U	1.0	ug/L			04/07/22 15:46	1
Bromodichloromethane	1.0	U	1.0	ug/L			04/07/22 15:46	1
Bromoform	1.0	U	1.0	ug/L			04/07/22 15:46	1
Bromomethane	1.0	U	1.0	ug/L			04/07/22 15:46	1
2-Butanone (MEK)	10	U	10	ug/L			04/07/22 15:46	1
Carbon disulfide	1.0	U	1.0	ug/L			04/07/22 15:46	1
Carbon tetrachloride	1.0	U	1.0	ug/L			04/07/22 15:46	1
Chlorobenzene	1.0	U	1.0	ug/L			04/07/22 15:46	1
Chloroethane	1.0	U	1.0	ug/L			04/07/22 15:46	1
Chloroform	1.0	U	1.0	ug/L			04/07/22 15:46	1
Chloromethane	1.0	U	1.0	ug/L			04/07/22 15:46	1
1,1-Dichloroethane	1.0	U	1.0	ug/L			04/07/22 15:46	1
1,2-Dichloroethane	1.0	U	1.0	ug/L			04/07/22 15:46	1
1,1-Dichloroethene	1.0	U	1.0	ug/L			04/07/22 15:46	1
1,2-Dichloropropane	1.0	U	1.0	ug/L			04/07/22 15:46	1
cis-1,3-Dichloropropene	1.0	U	1.0	ug/L			04/07/22 15:46	1
trans-1,3-Dichloropropene	1.0	U	1.0	ug/L			04/07/22 15:46	1
Ethylbenzene	1.0	U	1.0	ug/L			04/07/22 15:46	1
2-Hexanone	10	U	10	ug/L			04/07/22 15:46	1
Methylene Chloride	5.0	U	5.0	ug/L			04/07/22 15:46	1
4-Methyl-2-pentanone (MIBK)	10	U	10	ug/L			04/07/22 15:46	1
Styrene	1.0	U	1.0	ug/L			04/07/22 15:46	1
1,1,2,2-Tetrachloroethane	1.0		1.0	ug/L			04/07/22 15:46	1
Tetrachloroethene	1.0	U	1.0	ug/L			04/07/22 15:46	1
Toluene	1.0	U	1.0	ug/L			04/07/22 15:46	1
Trichloroethene	1.0	U	1.0	ug/L			04/07/22 15:46	1
Vinyl chloride	1.0	U	1.0	ug/L			04/07/22 15:46	1
Xylenes, Total	2.0	U	2.0	ug/L			04/07/22 15:46	1
1,1,1-Trichloroethane	1.0	U	1.0	ug/L			04/07/22 15:46	1
1,1,2-Trichloroethane	1.0	U	1.0	ug/L			04/07/22 15:46	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	ug/L			04/07/22 15:46	1
1,2-Dibromoethane	1.0	U	1.0	ug/L			04/07/22 15:46	1
Dichlorodifluoromethane	1.0	U	1.0	ug/L			04/07/22 15:46	1
cis-1,2-Dichloroethene	1.0	U	1.0	ug/L			04/07/22 15:46	1
trans-1,2-Dichloroethene	1.0	U	1.0	ug/L			04/07/22 15:46	1
Isopropylbenzene	1.0		1.0	ug/L			04/07/22 15:46	1
Methyl tert-butyl ether	1.0	U	1.0	ug/L			04/07/22 15:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0		1.0	ug/L			04/07/22 15:46	1
1,2,4-Trichlorobenzene	1.0	U	1.0	ug/L			04/07/22 15:46	1
1,2-Dichlorobenzene	1.0		1.0	ug/L			04/07/22 15:46	1
1,3-Dichlorobenzene	1.0		1.0	ug/L			04/07/22 15:46	1
1,4-Dichlorobenzene	1.0		1.0	ug/L			04/07/22 15:46	1
Trichlorofluoromethane	1.0		1.0	ug/L			04/07/22 15:46	1
Dibromochloromethane	1.0		1.0	ug/L			04/07/22 15:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		62 - 137		-		04/07/22 15:46	1
4-Bromofluorobenzene (Surr)	85		56 - 136				04/07/22 15:46	1
- · · · · · · ·			70 400				04/07/00 45 40	

Eurofins Canton

04/07/22 15:46

78 - 122

97

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Client: ZF Active Safety and Electronics LLC Job ID: 240-164584-1

Project/Site: Milford

Date Received: 04/06/22 08:00

Client Sample ID: FIELD BLANK_040422 Lab Sample ID: 240-164584-3

Date Collected: 04/04/22 11:45

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

%Recovery Qualifier Limits Prepared Analyzed Dil Fac Dibromofluoromethane (Surr) 90 73 - 120 04/07/22 15:46

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Client Sample ID: TRIP BLANK

Date Collected: 04/04/22 00:00 Date Received: 04/06/22 08:00

4-Bromofluorobenzene (Surr)

Toluene-d8 (Surr)

Lab Sample ID: 240-164584-4

Matrix: Water

Job ID: 240-164584-1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	ug/L			04/07/22 16:12	1
Benzene	1.0	U	1.0	ug/L			04/07/22 16:12	1
Bromodichloromethane	1.0	U	1.0	ug/L			04/07/22 16:12	1
Bromoform	1.0	U	1.0	ug/L			04/07/22 16:12	1
Bromomethane	1.0	U	1.0	ug/L			04/07/22 16:12	1
2-Butanone (MEK)	10	U	10	ug/L			04/07/22 16:12	1
Carbon disulfide	1.0	U	1.0	ug/L			04/07/22 16:12	1
Carbon tetrachloride	1.0	U	1.0	ug/L			04/07/22 16:12	1
Chlorobenzene	1.0	U	1.0	ug/L			04/07/22 16:12	1
Chloroethane	1.0	Ü	1.0	ug/L			04/07/22 16:12	1
Chloroform	1.0	U	1.0	ug/L			04/07/22 16:12	1
Chloromethane	1.0	U	1.0	ug/L			04/07/22 16:12	1
1,1-Dichloroethane	1.0	U	1.0	ug/L			04/07/22 16:12	1
1,2-Dichloroethane	1.0	U	1.0	ug/L			04/07/22 16:12	1
1,1-Dichloroethene	1.0		1.0	ug/L			04/07/22 16:12	1
1,2-Dichloropropane	1.0		1.0	ug/L			04/07/22 16:12	1
cis-1,3-Dichloropropene	1.0	U	1.0	ug/L			04/07/22 16:12	1
trans-1,3-Dichloropropene	1.0	U	1.0	ug/L			04/07/22 16:12	1
Ethylbenzene	1.0	U	1.0	ug/L			04/07/22 16:12	1
2-Hexanone	10		10	ug/L			04/07/22 16:12	1
Methylene Chloride	5.0		5.0	ug/L			04/07/22 16:12	1
4-Methyl-2-pentanone (MIBK)	10		10	ug/L			04/07/22 16:12	· · · · · · · · · · · 1
Styrene	1.0		1.0	ug/L			04/07/22 16:12	1
1,1,2,2-Tetrachloroethane	1.0		1.0	ug/L			04/07/22 16:12	1
Tetrachloroethene	1.0		1.0	ug/L			04/07/22 16:12	· · · · · · · · · · · · · · · · · · ·
Toluene	1.0		1.0	ug/L			04/07/22 16:12	1
Trichloroethene	1.0		1.0	ug/L			04/07/22 16:12	1
Vinyl chloride	1.0		1.0	ug/L			04/07/22 16:12	· · · · · · · · · · · · · · · · · · ·
Xylenes, Total	2.0		2.0	ug/L			04/07/22 16:12	1
1,1,1-Trichloroethane	1.0		1.0	ug/L			04/07/22 16:12	1
1,1,2-Trichloroethane	1.0		1.0	ug/L			04/07/22 16:12	
1,2-Dibromo-3-Chloropropane	2.0		2.0	ug/L			04/07/22 16:12	1
1,2-Dibromoethane	1.0		1.0	ug/L			04/07/22 16:12	1
Dichlorodifluoromethane	1.0		1.0	ug/L			04/07/22 16:12	
cis-1,2-Dichloroethene	1.0		1.0	ug/L ug/L			04/07/22 16:12	1
trans-1,2-Dichloroethene	1.0		1.0	ug/L ug/L			04/07/22 16:12	1
	1.0							
Isopropylbenzene			1.0	ug/L			04/07/22 16:12	1
Methyl tert-butyl ether	1.0		1.0	ug/L			04/07/22 16:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0		1.0	ug/L			04/07/22 16:12 04/07/22 16:12	1
1,2,4-Trichlorobenzene	1.0		1.0	ug/L				1
1,2-Dichlorobenzene	1.0		1.0	ug/L			04/07/22 16:12	1
1,3-Dichlorobenzene	1.0		1.0	ug/L			04/07/22 16:12	
1,4-Dichlorobenzene	1.0		1.0	ug/L			04/07/22 16:12	1
Trichlorofluoromethane	1.0		1.0	ug/L			04/07/22 16:12	1
Dibromochloromethane	1.0	U	1.0	ug/L			04/07/22 16:12	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		62 - 137		-		04/07/22 16:12	1
' /								

Eurofins Canton

04/07/22 16:12

04/07/22 16:12

56 - 136

78 - 122

86

Client: ZF Active Safety and Electronics LLC Job ID: 240-164584-1

Project/Site: Milford

Date Received: 04/06/22 08:00

Client Sample ID: TRIP BLANK Lab Sample ID: 240-164584-4

Date Collected: 04/04/22 00:00 **Matrix: Water**

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

%Recovery Qualifier Limits Prepared Analyzed Dil Fac Dibromofluoromethane (Surr) 92 73 - 120 04/07/22 16:12

Surrogate Summary

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water Prep Type: Total/NA

		Percent Surro				
		DCA	BFB	TOL	DBFM	
Lab Sample ID	Client Sample ID	(62-137)	(56-136)	(78-122)	(73-120)	
240-164584-1	OW-16D2_040422	105	85	98	93	
240-164584-2	EQUIPMENT BLANK_040422	104	87	98	90	
240-164584-3	FIELD BLANK_040422	105	85	97	90	
240-164584-4	TRIP BLANK	104	86	97	92	
LCS 240-522044/5	Lab Control Sample	97	98	97	89	
MB 240-522044/9	Method Blank	102	89	97	89	

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

DBFM = Dibromofluoromethane (Surr)

Eurofins Canton

Job ID: 240-164584-1

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Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-522044/9

Matrix: Water

1,2-Dichloroethane-d4 (Surr)

Client Sample ID: Method Blank **Prep Type: Total/NA**

Job ID: 240-164584-1

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	ug/L			04/07/22 14:06	1
Benzene	1.0	U	1.0	ug/L			04/07/22 14:06	1
Bromodichloromethane	1.0	U	1.0	ug/L			04/07/22 14:06	1
Bromoform	1.0	U	1.0	ug/L			04/07/22 14:06	1
Bromomethane	1.0	U	1.0	ug/L			04/07/22 14:06	1
2-Butanone (MEK)	10	U	10	ug/L			04/07/22 14:06	1
Carbon disulfide	1.0	U	1.0	ug/L			04/07/22 14:06	1
Carbon tetrachloride	1.0	U	1.0	ug/L			04/07/22 14:06	1
Chlorobenzene	1.0	U	1.0	ug/L			04/07/22 14:06	1
Chloroethane	1.0	U	1.0	ug/L			04/07/22 14:06	1
Chloroform	1.0	U	1.0	ug/L			04/07/22 14:06	1
Chloromethane	1.0	U	1.0	ug/L			04/07/22 14:06	1
1,1-Dichloroethane	1.0	U	1.0	ug/L			04/07/22 14:06	1
1,2-Dichloroethane	1.0	U	1.0	ug/L			04/07/22 14:06	1
1,1-Dichloroethene	1.0	U	1.0	ug/L			04/07/22 14:06	1
1,2-Dichloropropane	1.0	U	1.0	ug/L			04/07/22 14:06	1
cis-1,3-Dichloropropene	1.0	U	1.0	ug/L			04/07/22 14:06	1
trans-1,3-Dichloropropene	1.0	U	1.0	ug/L			04/07/22 14:06	1
Ethylbenzene	1.0	U	1.0	ug/L			04/07/22 14:06	1
2-Hexanone	10	U	10	ug/L			04/07/22 14:06	1
Methylene Chloride	5.0	U	5.0	ug/L			04/07/22 14:06	1
4-Methyl-2-pentanone (MIBK)	10	U	10	ug/L			04/07/22 14:06	1
Styrene	1.0	U	1.0	ug/L			04/07/22 14:06	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	ug/L			04/07/22 14:06	1
Tetrachloroethene	1.0	U	1.0	ug/L			04/07/22 14:06	1
Toluene	1.0	U	1.0	ug/L			04/07/22 14:06	1
Trichloroethene	1.0	U	1.0	ug/L			04/07/22 14:06	1
Vinyl chloride	1.0	U	1.0	ug/L			04/07/22 14:06	1
Xylenes, Total	2.0	U	2.0	ug/L			04/07/22 14:06	1
1,1,1-Trichloroethane	1.0	U	1.0	ug/L			04/07/22 14:06	1
1,1,2-Trichloroethane	1.0	U	1.0	ug/L			04/07/22 14:06	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	ug/L			04/07/22 14:06	1
1,2-Dibromoethane	1.0	U	1.0	ug/L			04/07/22 14:06	1
Dichlorodifluoromethane	1.0	U	1.0	ug/L			04/07/22 14:06	1
cis-1,2-Dichloroethene	1.0	U	1.0	ug/L			04/07/22 14:06	1
trans-1,2-Dichloroethene	1.0	U	1.0	ug/L			04/07/22 14:06	1
Isopropylbenzene	1.0	U	1.0	ug/L			04/07/22 14:06	1
Methyl tert-butyl ether	1.0	U	1.0	ug/L			04/07/22 14:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	ug/L			04/07/22 14:06	1
1,2,4-Trichlorobenzene	1.0	U	1.0	ug/L			04/07/22 14:06	1
1,2-Dichlorobenzene	1.0	U	1.0	ug/L			04/07/22 14:06	1
1,3-Dichlorobenzene	1.0	U	1.0	ug/L			04/07/22 14:06	1
1,4-Dichlorobenzene	1.0	U	1.0	ug/L			04/07/22 14:06	1
Trichlorofluoromethane	1.0	U	1.0	ug/L			04/07/22 14:06	1
Dibromochloromethane	1.0	U	1.0	ug/L			04/07/22 14:06	1
		MB						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1 2 Diableranthone d1 (Curr)	100		60 107				04/07/00 44:06	

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04/07/22 14:06

62 - 137

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Job ID: 240-164584-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-522044/9

Matrix: Water

Analysis Batch: 522044

Client Sample ID: Method Blank

Prep Type: Total/NA

MB MB %Recovery Surrogate Qualifier Limits Prepared Dil Fac Analyzed 4-Bromofluorobenzene (Surr) 89 56 - 136 04/07/22 14:06 Toluene-d8 (Surr) 97 78 - 122 04/07/22 14:06 Dibromofluoromethane (Surr) 89 73 - 120 04/07/22 14:06

Lab Sample ID: LCS 240-522044/5

Matrix: Water

1,1,2-Trichloroethane

1,2-Dibromoethane

Isopropylbenzene

ne

Dichlorodifluoromethane

trans-1,2-Dichloroethene

1,1,2-Trichloro-1,2,2-trifluoroetha

cis-1,2-Dichloroethene

Methyl tert-butyl ether

1,2-Dibromo-3-Chloropropane

Analysis Batch: 522044

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

•	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Acetone	50.0	73.4		ug/L		147	50 - 149	
Benzene	25.0	25.7		ug/L		103	77 - 123	
Bromodichloromethane	25.0	27.4		ug/L		110	69 - 126	
Bromoform	25.0	23.4		ug/L		94	57 - 129	
Bromomethane	25.0	25.9		ug/L		103	36 - 142	
2-Butanone (MEK)	50.0	55.9		ug/L		112	54 - 156	
Carbon disulfide	25.0	22.8		ug/L		91	43 - 140	
Carbon tetrachloride	25.0	27.3		ug/L		109	55 - 137	
Chlorobenzene	25.0	26.1		ug/L		104	80 - 121	
Chloroethane	25.0	26.1		ug/L		104	38 - 152	
Chloroform	25.0	25.5		ug/L		102	74 - 122	
Chloromethane	25.0	27.6		ug/L		110	47 - 143	
1,1-Dichloroethane	25.0	25.1		ug/L		101	72 - 127	
1,2-Dichloroethane	25.0	26.9		ug/L		108	66 - 128	
1,1-Dichloroethene	25.0	23.4		ug/L		94	63 - 134	
1,2-Dichloropropane	25.0	27.7		ug/L		111	75 - 133	
cis-1,3-Dichloropropene	25.0	27.9		ug/L		111	64 - 130	
trans-1,3-Dichloropropene	25.0	29.6		ug/L		118	57 - 129	
Ethylbenzene	25.0	27.8		ug/L		111	80 - 121	
2-Hexanone	50.0	66.7		ug/L		133	43 - 167	
Methylene Chloride	25.0	26.6		ug/L		106	71 - 125	
4-Methyl-2-pentanone (MIBK)	50.0	63.5		ug/L		127	46 - 158	
Styrene	25.0	28.7		ug/L		115	80 - 135	
1,1,2,2-Tetrachloroethane	25.0	30.9		ug/L		123	58 - 157	
Tetrachloroethene	25.0	24.0		ug/L		96	76 - 123	
Toluene	25.0	26.6		ug/L		106	80 - 123	
Trichloroethene	25.0	23.2		ug/L		93	70 - 122	
Vinyl chloride	25.0	27.1		ug/L		109	60 - 144	
Xylenes, Total	50.0	55.9		ug/L		112	80 - 121	
1,1,1-Trichloroethane	25.0	25.8		ug/L		103	64 - 131	

Eurofins Canton

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25.0

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25.0

27.2

24.7

27.1

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20.8

ug/L

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ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

109

99

108

81

98

98

115

106

83

70 - 138

53 - 135

71 - 134

34 - 153

77 - 123

75 - 124

74 - 128

65 - 126

51 - 146

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Job ID: 240-164584-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-522044/5

Matrix: Water

Analysis Batch: 522044

Client Sample ID: Lab Control Sample

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,2,4-Trichlorobenzene	25.0	30.1		ug/L		120	44 - 147	
1,2-Dichlorobenzene	25.0	27.6		ug/L		110	78 - 120	
1,3-Dichlorobenzene	25.0	27.1		ug/L		108	80 - 120	
1,4-Dichlorobenzene	25.0	26.8		ug/L		107	80 - 120	
Trichlorofluoromethane	25.0	28.0		ug/L		112	30 - 170	
Dibromochloromethane	25.0	27.5		ug/L		110	70 - 124	
m-Xylene & p-Xylene	25.0	27.8		ug/L		111	80 - 120	
o-Xylene	25.0	28.1		ug/L		112	80 - 123	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		62 - 137
4-Bromofluorobenzene (Surr)	98		56 - 136
Toluene-d8 (Surr)	97		78 - 122
Dibromofluoromethane (Surr)	89		73 - 120

Prep Type: Total/NA

QC Association Summary

Client: ZF Active Safety and Electronics LLC Job ID: 240-164584-1

Project/Site: Milford

GC/MS VOA

Analysis Batch: 522044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-164584-1	OW-16D2_040422	Total/NA	Water	8260B	
240-164584-2	EQUIPMENT BLANK_040422	Total/NA	Water	8260B	
240-164584-3	FIELD BLANK_040422	Total/NA	Water	8260B	
240-164584-4	TRIP BLANK	Total/NA	Water	8260B	
MB 240-522044/9	Method Blank	Total/NA	Water	8260B	
LCS 240-522044/5	Lab Control Sample	Total/NA	Water	8260B	

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Lab Chronicle

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Client Sample ID: OW-16D2 040422 Lab Sample ID: 240-164584-1

Date Collected: 04/04/22 11:55 **Matrix: Water**

Date Received: 04/06/22 08:00

Batch Dilution Batch Batch **Prepared** Method or Analyzed **Prep Type** Type Run **Factor** Number Analyst Lab Total/NA Analysis 8260B 522044 04/07/22 17:02 SAM TAL CAN

Client Sample ID: EQUIPMENT BLANK 040422

Date Collected: 04/04/22 12:10

Date Received: 04/06/22 08:00

Batch Batch Dilution **Batch** Prepared **Prep Type** Type Method Run Factor Number or Analyzed Analyst Lab Total/NA Analysis 8260B 522044 04/07/22 15:21 SAM TAL CAN

Client Sample ID: FIELD BLANK_040422 Lab Sample ID: 240-164584-3

Date Collected: 04/04/22 11:45

Date Received: 04/06/22 08:00 Batch Batch Dilution Batch **Prepared**

Prep Type Method **Factor** Number or Analyzed Type Run Analyst Lab TAL CAN Total/NA Analysis 8260B 522044 04/07/22 15:46 SAM

Client Sample ID: TRIP BLANK Lab Sample ID: 240-164584-4

Date Collected: 04/04/22 00:00

Date Received: 04/06/22 08:00

Batch **Batch** Dilution Batch **Prepared Prep Type** Method Run Factor Number or Analyzed Analyst Type Lab Analysis 8260B 522044 04/07/22 16:12 SAM TAL CAN Total/NA

Laboratory References:

TAL CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Job ID: 240-164584-1

Matrix: Water

Matrix: Water

Matrix: Water

Lab Sample ID: 240-164584-2

Accreditation/Certification Summary

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Job ID: 240-164584-1

Laboratory: Eurofins Canton

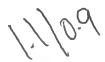
All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date	
California	State	2927	02-27-23	
Connecticut	State	PH-0590	12-31-23	
Florida	NELAP	E87225	06-30-22	
Georgia	State	4062	02-23-22 *	
Illinois	NELAP	200004	07-31-22	
Iowa	State	421	06-01-23	
Kansas	NELAP	E-10336	04-30-22	
Kentucky (UST)	State	112225	02-23-22 *	
Kentucky (WW)	State	KY98016	12-31-22	
Minnesota	NELAP	039-999-348	12-31-22	
Minnesota (Petrofund)	State	3506	08-01-23	
New Jersey	NELAP	OH001	11-06-22	
New York	NELAP	10975	04-01-23	
Ohio	State	8303	02-23-23	
Ohio VAP	State	CL0024	02-27-23	
Oregon	NELAP	4062	02-27-23	
Pennsylvania	NELAP	68-00340	08-31-22	
Texas	NELAP	T104704517-22-16	08-31-22	
Virginia	NELAP	11570	09-14-22	
Washington	State	C971	01-12-23	
West Virginia DEP	State	210	12-31-22	

 $^{^{\}star} \ \text{Accreditation/Certification renewal pending - accreditation/certification considered valid}.$

Eurofins Canton





STL North Canton						- 47												T	LAB USE ONLY
4101 Shuffel Drive NW					721		Chain	Of Cu	stod	v/	Anal	vsis R	eaue	129					ID No. (Lot No.)
North Canton, OH 44720												y 515 1.	- qu	.,,				Datostatos	777 1404 (204 140.)
Aim Michael DelMonico				Privileged &	onfidential		Yes			Site No	one:	Milford							
Project Type:	Groundy	vater San	npling · IZ	IRW PO No.	30046730 0001	Z		1		-	cation:		lord. Mic	hieran					
IRW PM: (name, company, address,	-mail)			Database Ma	nager: (name, comp	any, addres	ss, E-mail)			T					es Code (see be	low)			
Bob Bleazard				Marina Samp	and Sharon Clouse					1									
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Mesa, AZ 85212				Novi, MI 483	17					1					4			1	
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Analysis Level	Level 1 (k			Sampler	Stace	u Ha	nnula			1 3					8				
TAT	10 Busine	ss Days (S	standard - Level 1)	Deliverable	Deliverable EDD/PDF (e-mail)		bos			1 1		0							
		Sa	mple Identification a	nd Infor	nation					or Composite	Filtered				Chain of				
Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Dat	e Sample Fime	Sample Type	Sample Matrix	Sample Purpose	No. of Cont.	Grab o	Field Fi				f Custody			1.0	b Sample Numbers
1 OW-16D2			OW-16D2_040422	4.4.2	2 1155	GW	WATER	REG	3	G	X				tody				
2				-1			me I												
3 EQUIPMENT BLANK		Tew I	EQUIPMENT BLANK 04041	2	1210	QC	WATER	REG	ī	G	N X								
4 FIELD BLANK			FIELD BLANK 0404	2	1145	QC	WATER	REG	1	G	NX								
5 TRIP BLANK			TRIP BLANK_			QC	WATER	REG	1	G	NX								
6							W1 12.												
7														1	1 1 1	1			
8							C71										-		
9																			
10																			
11																			
Special Instructions																			
Stacey Harm	la		Arcodi's			Received h	N//			Compa	d				Condition		Custody	Seals Intact	
			Date Fine 44.22 2:19	Ď.		ZIA				Date T	me 4/4	187 1417	-		Cooler Temp				
Relinquit for the			Company ATTH			Received b	r /				EE				Condition		Custody	Seals Intact	
diffe			Date Time 4/4/27 14/20			Cold	storigi	0		Date 1	4-27	1700			Cooler Temp				
Relinquished by	-1	1	Company EETA			Walle !	1/0	_		Compa	ET	MIC			Condition		Custody	Sends Intact	
Cold Storage to	1. Ha	rlin	Date time 45-22 1054			1'en						.22 3) 4		Cooler Lemp				
reaniquistica by:			Company Date Time			Received h	1,4			Compa			-		Condition		Custody	/ Seals Intact	
			Date time							Date 1	ime				Cooler Temp	9			
Preservatives Code: 0 = None; 1 = HC	L; 2 = HN0	03; 3 = H	2SO4; 4 = NaOH; 5 = Zn. Acetate;	6 - MeOH; 7	- NaHSO4; 8 - Ot	her (specify):												





Eurofins TestAmerica	Canton Sample Rece	ipt Form/Narrativ		Login#:	164584
Canton Facility Client TRIN		C'a-N-		Cooler un	packed by:
	(-22	Opened on 4. C	-71	Mat	4
Cooler Received on 4	IDO FACCOL				
FedEx: 1" Grd Exp		Chent Drop On	TestAmerica Courier	Other	
Receipt After-bours: Dre		Client Cooler	Storage Location		
1. Cooler temperature will IR GUNW IR-14 (CF IR GUNW IR-15 (CF IR GUN #IR-15 (CF IR	d: Subble Wrap d: Subble Wrap For the Blue Ice pon receipt G-0.2 °C) Observed Condition seals on the outside of the cooler dy seals on the bottle(s) dy seals intact and unconstructed to the cooler(s) company the sample(s) ers relinquished & signer s) who collected the samen good condition (Unbred) (ID/Date/Time) be reconstructed to perform indicate samples and all listed on the cooler(s) the COC specify preser used for the test(s) indicates samples and all listed on the cooler(s) Thave been checked at mple(s) at the correct phase COC? mm in any VOA vials? k present in the cooler(s)	Dry Ice Water Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. If Yes (s) signed & dated? Or bottle kits (LLHg Impromised? Corbonised? In the appropriate papers clearly identified with the COC Vatives (TN) # of cooler Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler	None None None See Multiple Cooler Fe C Corrected Cooler C Corrected Cooler C Corrected Cooler Yes MeHg)? Yes Ince? In this. Yes O O H Z O 1 G Yes	Temp. No No No No No No No No No No No No No	Tests that are not checked for pH by Receiving: VOAs Oil and Grease TOC Tab/comp(Y/N)?
	Date	by			er
Concerning					
18. CHAIN OF CUSTO	DY & SAMPLE DISC	REPANCIES 0	dditional next page	Samples proc	essed by:
19. SAMPLE CONDITI Sample(s) Sample(s) Sample(s)			were received	in a broken co	otainer.
20. SAMPLE PRESERV					
Sample(s)			33000 £1	har processed i	n the laboratory.
Sample(s) Time preserved:	Preservative(s) ad	ded/Lot number(s):	were lutti	ilei preserveu i	
VOA Sample Preservation					

WI-NC-099



Environment Testing America

ANALYTICAL REPORT

Eurofins Canton 180 S. Van Buren Avenue Barberton, OH 44203 Tel: (330)497-9396

Laboratory Job ID: 240-164831-1 Client Project/Site: TRW Milford

For:

ZF Active Safety and Electronics LLC Tech 2 12025 Tech Center Drive Livonia, Michigan 48150

Attn: Scott Detwiler

Mode Del Your

Authorized for release by: 4/14/2022 2:32:39 PM

Michael DelMonico, Project Manager I (330)497-9396

Michael.DelMonico@et.eurofinsus.com

Links

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Total Access

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www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ZF Active Safety and Electronics LLC

Job ID: 240-164831-1 Project/Site: TRW Milford

Qualifiers

GC/MS VOA

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.

Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery **CFL** Contains Free Liquid CFU Colony Forming Unit CNF Contains No Free Liquid

Duplicate Error Ratio (normalized absolute difference) **DER**

Dil Fac **Dilution Factor**

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

Estimated Detection Limit (Dioxin) **EDL** LOD Limit of Detection (DoD/DOE) LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level" MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit MLMinimum Level (Dioxin) MPN Most Probable Number Method Quantitation Limit MQL

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive QC **Quality Control**

Relative Error Ratio (Radiochemistry) **RER**

Reporting Limit or Requested Limit (Radiochemistry) RL

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin) **TEQ** Toxicity Equivalent Quotient (Dioxin)

Too Numerous To Count **TNTC**

Eurofins Canton

4/14/2022

Case Narrative

Client: ZF Active Safety and Electronics LLC

Project/Site: TRW Milford

Job ID: 240-164831-1

Job ID: 240-164831-1

Laboratory: Eurofins Canton

Narrative

Job Narrative 240-164831-1

Comments

No additional comments.

Receipt

The samples were received on 4/9/2022~8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.1° C.

GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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Method Summary

Client: ZF Active Safety and Electronics LLC

Project/Site: TRW Milford

 Method
 Method Description
 Protocol
 Laboratory

 8260B
 Volatile Organic Compounds (GC/MS)
 SW846
 TAL CAN

 5030B
 Purge and Trap
 SW846
 TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Job ID: 240-164831-1

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Sample Summary

Client: ZF Active Safety and Electronics LLC Project/Site: TRW Milford

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-164831-1	OW-16D2_040822	Water	04/08/22 11:35	04/09/22 08:00
240-164831-2	EQUIPMENT BLANK_040822	Water	04/08/22 11:50	04/09/22 08:00
240-164831-3	FIELD BLANK_040822	Water	04/08/22 10:35	04/09/22 08:00
240-164831-4	TRIP BLANK	Water	04/08/22 10:35	04/09/22 08:00

Job ID: 240-164831-1

Detection Summary

Client: ZF Active Safety and Electronics LLC Job

Project/Site: TRW Milford

Client Sample ID: OW-16D2_040822	Lab Sample ID: 240-164831-1

Analyte	Result Qualifier	RL	Unit	Dil Fac D	Method	Prep Type
1,1-Dichloroethane	3.0	1.0	ug/L		8260B	Total/NA
cis-1,2-Dichloroethene	18	1.0	ug/L	1	8260B	Total/NA
trans-1,2-Dichloroethene	1.5	1.0	ug/L	1	8260B	Total/NA

No Detections.

Client Sample ID: FIELD BLANK_040822 Lab Sample ID: 240-164831-3

No Detections.

Client Sample ID: TRIP BLANK Lab Sample ID: 240-164831-4

No Detections.

This Detection Summary does not include radiochemical test results.

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Client: ZF Active Safety and Electronics LLC Job ID: 240-164831-1

Project/Site: TRW Milford

Client Sample ID: OW-16D2_040822

Date Collected: 04/08/22 11:35

Date Received: 04/09/22 08:00

Lab Sample ID: 240-164831-1

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	ug/L			04/13/22 15:59	
Benzene	1.0	U	1.0	ug/L			04/13/22 15:59	
Bromodichloromethane	1.0	U	1.0	ug/L			04/13/22 15:59	
Bromoform	1.0	U	1.0	ug/L			04/13/22 15:59	· · · · · · · · ·
Bromomethane	1.0	U	1.0	ug/L			04/13/22 15:59	
2-Butanone (MEK)	10	U	10	ug/L			04/13/22 15:59	
Carbon disulfide	1.0	U	1.0	ug/L			04/13/22 15:59	
Carbon tetrachloride	1.0	U	1.0	ug/L			04/13/22 15:59	•
Chlorobenzene	1.0	U	1.0	ug/L			04/13/22 15:59	
Chloroethane	1.0	U	1.0	ug/L			04/13/22 15:59	,
Chloroform	1.0	U	1.0	ug/L			04/13/22 15:59	
Chloromethane	1.0	U	1.0	ug/L			04/13/22 15:59	
1,1-Dichloroethane	3.0		1.0	ug/L			04/13/22 15:59	1
1,2-Dichloroethane	1.0	U	1.0	ug/L			04/13/22 15:59	
1,1-Dichloroethene	1.0	U	1.0	ug/L			04/13/22 15:59	
1,2-Dichloropropane	1.0	U	1.0	ug/L			04/13/22 15:59	1
cis-1,3-Dichloropropene	1.0	U	1.0	ug/L			04/13/22 15:59	
trans-1,3-Dichloropropene	1.0	U	1.0	ug/L			04/13/22 15:59	1
Ethylbenzene	1.0		1.0	ug/L			04/13/22 15:59	1
2-Hexanone	10	U	10	ug/L			04/13/22 15:59	1
Methylene Chloride	5.0	U	5.0	ug/L			04/13/22 15:59	1
4-Methyl-2-pentanone (MIBK)	10		10	ug/L			04/13/22 15:59	
Styrene	1.0		1.0	ug/L			04/13/22 15:59	
1,1,2,2-Tetrachloroethane	1.0		1.0	ug/L			04/13/22 15:59	1
Tetrachloroethene	1.0		1.0	ug/L			04/13/22 15:59	· · · · · · · · · · · · · · · · · · ·
Toluene	1.0		1.0	ug/L			04/13/22 15:59	1
Trichloroethene	1.0		1.0	ug/L			04/13/22 15:59	
Vinyl chloride	1.0		1.0	ug/L			04/13/22 15:59	
Xylenes, Total	2.0		2.0	ug/L			04/13/22 15:59	
1,1,1-Trichloroethane	1.0		1.0	ug/L			04/13/22 15:59	
1,1,2-Trichloroethane	1.0		1.0	ug/L			04/13/22 15:59	
1,2-Dibromo-3-Chloropropane	2.0		2.0	ug/L			04/13/22 15:59	1
1,2-Dibromoethane	1.0		1.0	ug/L			04/13/22 15:59	
Dichlorodifluoromethane	1.0		1.0	ug/L			04/13/22 15:59	
cis-1,2-Dichloroethene	18	J	1.0	ug/L			04/13/22 15:59	1
trans-1,2-Dichloroethene	1.5		1.0	ug/L			04/13/22 15:59	
Isopropylbenzene	1.0		1.0	ug/L			04/13/22 15:59	· · · · · · · · · · · · · · · · · · ·
Methyl tert-butyl ether	1.0		1.0	ug/L			04/13/22 15:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0		1.0	ug/L			04/13/22 15:59	
1,2,4-Trichlorobenzene	1.0		1.0	ug/L			04/13/22 15:59	
1,2-Dichlorobenzene	1.0		1.0	ug/L			04/13/22 15:59	,
1,3-Dichlorobenzene	1.0		1.0	ug/L			04/13/22 15:59	,
1,4-Dichlorobenzene	1.0		1.0	ug/L			04/13/22 15:59	,
Trichlorofluoromethane	1.0		1.0	ug/L			04/13/22 15:59	
Dibromochloromethane	1.0		1.0	ug/L			04/13/22 15:59	,
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4 (Surr)	75		62 - 137		_		04/13/22 15:59	1
4-Bromofluorobenzene (Surr)	79		56 - 136				04/13/22 15:59	1
Toluene-d8 (Surr)	85		78 - 122				04/13/22 15:59	1

Eurofins Canton

4/14/2022

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Client: ZF Active Safety and Electronics LLC Job ID: 240-164831-1

Project/Site: TRW Milford

Date Collected: 04/08/22 11:35

Matrix: Water

Date Received: 04/09/22 08:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

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Client: ZF Active Safety and Electronics LLC

Project/Site: TRW Milford

Toluene-d8 (Surr)

Client Sample ID: EQUIPMENT BLANK_040822

Date Collected: 04/08/22 11:50 Date Received: 04/09/22 08:00

Job ID: 240-164831-1

Lab Sample ID: 240-164831-2

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Acetone	10	U	10	ug/L			04/13/22 16:24	
Benzene	1.0	U	1.0	ug/L			04/13/22 16:24	
Bromodichloromethane	1.0	U	1.0	ug/L			04/13/22 16:24	
Bromoform	1.0	U	1.0	ug/L			04/13/22 16:24	
Bromomethane	1.0	U	1.0	ug/L			04/13/22 16:24	
2-Butanone (MEK)	10	U	10	ug/L			04/13/22 16:24	
Carbon disulfide	1.0	U	1.0	ug/L			04/13/22 16:24	
Carbon tetrachloride	1.0	U	1.0	ug/L			04/13/22 16:24	
Chlorobenzene	1.0	U	1.0	ug/L			04/13/22 16:24	
Chloroethane	1.0	U	1.0	ug/L			04/13/22 16:24	
Chloroform	1.0	U	1.0	ug/L			04/13/22 16:24	
Chloromethane	1.0	U	1.0	ug/L			04/13/22 16:24	
1,1-Dichloroethane	1.0		1.0	ug/L			04/13/22 16:24	
1,2-Dichloroethane	1.0		1.0	ug/L			04/13/22 16:24	
1,1-Dichloroethene	1.0		1.0	ug/L			04/13/22 16:24	
1,2-Dichloropropane	1.0		1.0	ug/L			04/13/22 16:24	
cis-1,3-Dichloropropene	1.0		1.0	ug/L			04/13/22 16:24	
trans-1,3-Dichloropropene	1.0		1.0	ug/L			04/13/22 16:24	
Ethylbenzene	1.0		1.0	ug/L			04/13/22 16:24	
2-Hexanone	10		10	ug/L			04/13/22 16:24	
Methylene Chloride	5.0		5.0	ug/L			04/13/22 16:24	
4-Methyl-2-pentanone (MIBK)	10		10	ug/L			04/13/22 16:24	
Styrene	1.0		1.0	ug/L			04/13/22 16:24	
1,1,2,2-Tetrachloroethane	1.0		1.0	ug/L			04/13/22 16:24	
Tetrachloroethene	1.0		1.0	ug/L			04/13/22 16:24	
Toluene	1.0		1.0	ug/L			04/13/22 16:24	
Trichloroethene	1.0		1.0	ug/L			04/13/22 16:24	
	1.0		1.0				04/13/22 16:24	
Vinyl chloride	2.0		2.0	ug/L			04/13/22 16:24	
Xylenes, Total 1,1,1-Trichloroethane	1.0		1.0	ug/L			04/13/22 16:24	
				ug/L				
1,1,2-Trichloroethane	1.0		1.0	ug/L			04/13/22 16:24	
1,2-Dibromo-3-Chloropropane	2.0		2.0	ug/L			04/13/22 16:24	
1,2-Dibromoethane	1.0		1.0	ug/L			04/13/22 16:24	
Dichlorodifluoromethane	1.0		1.0	ug/L			04/13/22 16:24	
cis-1,2-Dichloroethene	1.0		1.0	ug/L			04/13/22 16:24	
trans-1,2-Dichloroethene	1.0		1.0	ug/L			04/13/22 16:24	
Isopropylbenzene	1.0		1.0	ug/L			04/13/22 16:24	
Methyl tert-butyl ether	1.0		1.0	ug/L			04/13/22 16:24	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0		1.0	ug/L			04/13/22 16:24	
1,2,4-Trichlorobenzene	1.0		1.0	ug/L			04/13/22 16:24	
1,2-Dichlorobenzene	1.0		1.0	ug/L			04/13/22 16:24	
1,3-Dichlorobenzene	1.0		1.0	ug/L			04/13/22 16:24	
1,4-Dichlorobenzene	1.0		1.0	ug/L			04/13/22 16:24	
Trichlorofluoromethane	1.0		1.0	ug/L			04/13/22 16:24	
Dibromochloromethane	1.0	U	1.0	ug/L			04/13/22 16:24	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4 (Surr)	79		62 - 137				04/13/22 16:24	
4-Bromofluorobenzene (Surr)	79		56 - 136				04/13/22 16:24	

Eurofins Canton

04/13/22 16:24

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Client: ZF Active Safety and Electronics LLC Job ID: 240-164831-1

Project/Site: TRW Milford

Client Sample ID: EQUIPMENT BLANK_040822 Lab Sample ID: 240-164831-2

Date Collected: 04/08/22 11:50

Matrix: Water

Date Received: 04/09/22 08:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

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Client: ZF Active Safety and Electronics LLC Job ID: 240-164831-1

Project/Site: TRW Milford

Toluene-d8 (Surr)

Client Sample ID: FIELD BLANK_040822

Date Collected: 04/08/22 10:35 Date Received: 04/09/22 08:00 Lab Sample ID: 240-164831-3

Matrix: Water

Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	ug/L			04/13/22 16:49	1
Benzene	1.0	U	1.0	ug/L			04/13/22 16:49	1
Bromodichloromethane	1.0	U	1.0	ug/L			04/13/22 16:49	1
Bromoform	1.0	U	1.0	ug/L			04/13/22 16:49	1
Bromomethane	1.0	U	1.0	ug/L			04/13/22 16:49	1
2-Butanone (MEK)	10	U	10	ug/L			04/13/22 16:49	1
Carbon disulfide	1.0	U	1.0	ug/L			04/13/22 16:49	1
Carbon tetrachloride	1.0	U	1.0	ug/L			04/13/22 16:49	1
Chlorobenzene	1.0	U	1.0	ug/L			04/13/22 16:49	1
Chloroethane	1.0	U	1.0	ug/L			04/13/22 16:49	1
Chloroform	1.0	U	1.0	ug/L			04/13/22 16:49	1
Chloromethane	1.0	U	1.0	ug/L			04/13/22 16:49	1
1,1-Dichloroethane	1.0	U	1.0	ug/L			04/13/22 16:49	1
1,2-Dichloroethane	1.0	U	1.0	ug/L			04/13/22 16:49	1
1,1-Dichloroethene	1.0	U	1.0	ug/L			04/13/22 16:49	1
1,2-Dichloropropane	1.0	U	1.0	ug/L			04/13/22 16:49	1
cis-1,3-Dichloropropene	1.0	U	1.0	ug/L			04/13/22 16:49	1
trans-1,3-Dichloropropene	1.0	U	1.0	ug/L			04/13/22 16:49	1
Ethylbenzene	1.0	U	1.0	ug/L			04/13/22 16:49	1
2-Hexanone	10	U	10	ug/L			04/13/22 16:49	1
Methylene Chloride	5.0	U	5.0	ug/L			04/13/22 16:49	1
4-Methyl-2-pentanone (MIBK)	10	U	10	ug/L			04/13/22 16:49	1
Styrene	1.0	U	1.0	ug/L			04/13/22 16:49	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	ug/L			04/13/22 16:49	1
Tetrachloroethene	1.0	U	1.0	ug/L			04/13/22 16:49	1
Toluene	1.0	U	1.0	ug/L			04/13/22 16:49	1
Trichloroethene	1.0	U	1.0	ug/L			04/13/22 16:49	1
Vinyl chloride	1.0	U	1.0	ug/L			04/13/22 16:49	1
Xylenes, Total	2.0	U	2.0	ug/L			04/13/22 16:49	1
1,1,1-Trichloroethane	1.0	U	1.0	ug/L			04/13/22 16:49	1
1,1,2-Trichloroethane	1.0	U	1.0	ug/L			04/13/22 16:49	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	ug/L			04/13/22 16:49	1
1,2-Dibromoethane	1.0	U	1.0	ug/L			04/13/22 16:49	1
Dichlorodifluoromethane	1.0	U	1.0	ug/L			04/13/22 16:49	1
cis-1,2-Dichloroethene	1.0	U	1.0	ug/L			04/13/22 16:49	1
trans-1,2-Dichloroethene	1.0	U	1.0	ug/L			04/13/22 16:49	1
Isopropylbenzene	1.0	U	1.0	ug/L			04/13/22 16:49	1
Methyl tert-butyl ether	1.0	U	1.0	ug/L			04/13/22 16:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	ug/L			04/13/22 16:49	1
1,2,4-Trichlorobenzene	1.0	U	1.0	ug/L			04/13/22 16:49	1
1,2-Dichlorobenzene	1.0	U	1.0	ug/L			04/13/22 16:49	1
1,3-Dichlorobenzene	1.0	U	1.0	ug/L			04/13/22 16:49	1
1,4-Dichlorobenzene	1.0	U	1.0	ug/L			04/13/22 16:49	1
Trichlorofluoromethane	1.0		1.0	ug/L			04/13/22 16:49	1
Dibromochloromethane	1.0	U	1.0	ug/L			04/13/22 16:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	76		62 - 137		-		04/13/22 16:49	1
4-Bromofluorobenzene (Surr)	79		56 - 136				04/13/22 16:49	1
T / (0.40)	2.4		70 100				0.4/4.0/00.46.40	

Eurofins Canton

04/13/22 16:49

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Client: ZF Active Safety and Electronics LLC Job ID: 240-164831-1

Project/Site: TRW Milford

Client Sample ID: FIELD BLANK_040822 Lab Sample ID: 240-164831-3

Date Collected: 04/08/22 10:35

Matrix: Water

Date Received: 04/09/22 08:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

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Client: ZF Active Safety and Electronics LLC Job ID: 240-164831-1

Project/Site: TRW Milford

Toluene-d8 (Surr)

Client Sample ID: TRIP BLANK

Date Collected: 04/08/22 10:35 Date Received: 04/09/22 08:00 Lab Sample ID: 240-164831-4

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	ug/L			04/13/22 17:14	
Benzene	1.0	U	1.0	ug/L			04/13/22 17:14	•
Bromodichloromethane	1.0	U	1.0	ug/L			04/13/22 17:14	1
Bromoform	1.0	U	1.0	ug/L			04/13/22 17:14	1
Bromomethane	1.0	U	1.0	ug/L			04/13/22 17:14	1
2-Butanone (MEK)	10	U	10	ug/L			04/13/22 17:14	1
Carbon disulfide	1.0	U	1.0	ug/L			04/13/22 17:14	1
Carbon tetrachloride	1.0	U	1.0	ug/L			04/13/22 17:14	1
Chlorobenzene	1.0	U	1.0	ug/L			04/13/22 17:14	1
Chloroethane	1.0	Ü	1.0	ug/L			04/13/22 17:14	1
Chloroform	1.0	U	1.0	ug/L			04/13/22 17:14	1
Chloromethane	1.0	U	1.0	ug/L			04/13/22 17:14	1
1,1-Dichloroethane	1.0	U	1.0	ug/L			04/13/22 17:14	1
1,2-Dichloroethane	1.0		1.0	ug/L			04/13/22 17:14	1
1,1-Dichloroethene	1.0		1.0	ug/L			04/13/22 17:14	1
1,2-Dichloropropane	1.0		1.0	ug/L			04/13/22 17:14	1
cis-1,3-Dichloropropene	1.0		1.0	ug/L			04/13/22 17:14	1
trans-1,3-Dichloropropene	1.0	U	1.0	ug/L			04/13/22 17:14	1
Ethylbenzene	1.0		1.0	ug/L			04/13/22 17:14	1
2-Hexanone	10		10	ug/L			04/13/22 17:14	1
Methylene Chloride	5.0		5.0	ug/L			04/13/22 17:14	1
4-Methyl-2-pentanone (MIBK)	10		10	ug/L			04/13/22 17:14	1
Styrene	1.0		1.0	ug/L			04/13/22 17:14	1
1,1,2,2-Tetrachloroethane	1.0		1.0	ug/L			04/13/22 17:14	
Tetrachloroethene	1.0		1.0	ug/L			04/13/22 17:14	· · · · · · · · · · · · · · · · · · ·
Toluene	1.0		1.0	ug/L			04/13/22 17:14	1
Trichloroethene	1.0		1.0	ug/L			04/13/22 17:14	1
Vinyl chloride	1.0		1.0	ug/L			04/13/22 17:14	
Xylenes, Total	2.0		2.0	ug/L			04/13/22 17:14	1
1,1,1-Trichloroethane	1.0		1.0	ug/L			04/13/22 17:14	1
1,1,2-Trichloroethane	1.0		1.0	ug/L			04/13/22 17:14	· · · · · · · · · · · · · · · · · · ·
1,2-Dibromo-3-Chloropropane	2.0		2.0	ug/L			04/13/22 17:14	
1,2-Dibromoethane	1.0		1.0	ug/L			04/13/22 17:14	
Dichlorodifluoromethane	1.0		1.0	ug/L			04/13/22 17:14	
cis-1,2-Dichloroethene	1.0		1.0	ug/L			04/13/22 17:14	. 1
trans-1,2-Dichloroethene	1.0		1.0	ug/L			04/13/22 17:14	1
Isopropylbenzene	1.0		1.0	ug/L			04/13/22 17:14	
Methyl tert-butyl ether	1.0		1.0	ug/L			04/13/22 17:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0		1.0	ug/L ug/L			04/13/22 17:14	1
1,2,4-Trichlorobenzene	1.0		1.0	ug/L			04/13/22 17:14	' 1
1,2-Dichlorobenzene	1.0		1.0				04/13/22 17:14	1
1,3-Dichlorobenzene	1.0		1.0	ug/L ug/L			04/13/22 17:14	1
1,4-Dichlorobenzene	1.0						04/13/22 17:14	
Trichlorofluoromethane			1.0	ug/L				1
Dibromochloromethane	1.0 1.0		1.0 1.0	ug/L ug/L			04/13/22 17:14 04/13/22 17:14	1
DISTRICTION OFFICE II ALIE	1.0	J	1.0	ug/L			04/13/22 17.14	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	78		62 - 137		_		04/13/22 17:14	1
4-Bromofluorobenzene (Surr)	79		56 - 136				04/13/22 17:14	1
Tal			70 400				04/40/00 47:44	

Eurofins Canton

04/13/22 17:14

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Client: ZF Active Safety and Electronics LLC Job ID: 240-164831-1

Project/Site: TRW Milford

Date Received: 04/09/22 08:00

Client Sample ID: TRIP BLANK Lab Sample ID: 240-164831-4

Date Collected: 04/08/22 10:35 **Matrix: Water**

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

%Recovery Qualifier Limits Prepared Analyzed Dil Fac Dibromofluoromethane (Surr) 81 73 - 120 04/13/22 17:14

Surrogate Summary

Client: ZF Active Safety and Electronics LLC

Project/Site: TRW Milford

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water Prep Type: Total/NA

			Pe	ercent Surre	ogate Reco
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(62-137)	(56-136)	(78-122)	(73-120)
240-164831-1	OW-16D2_040822	75	79	85	88
240-164831-2	EQUIPMENT BLANK_040822	79	79	81	82
240-164831-3	FIELD BLANK_040822	76	79	84	81
240-164831-4	TRIP BLANK	78	79	82	81
LCS 240-522562/5	Lab Control Sample	74	86	80	87
MB 240-522562/8	Method Blank	78	80	83	84

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

DBFM = Dibromofluoromethane (Surr)

Eurofins Canton

Job ID: 240-164831-1

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Client: ZF Active Safety and Electronics LLC

Project/Site: TRW Milford

Job ID: 240-164831-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-522562/8

Matrix: Water

Analysis Batch: 522562

1,2-Dichloroethane-d4 (Surr)

Client Sample ID: Method Blank Prep Type: Total/NA

	MB	MB					
Analyte	Result	Qualifier	RL	Unit	D Prepared	Analyzed	Dil Fac
Acetone	10	U	10	ug/L		04/13/22 11:57	1
Benzene	1.0	U	1.0	ug/L		04/13/22 11:57	1
Bromodichloromethane	1.0	U	1.0	ug/L		04/13/22 11:57	1
Bromoform	1.0	U	1.0	ug/L		04/13/22 11:57	1
Bromomethane	1.0	U	1.0	ug/L		04/13/22 11:57	1
2-Butanone (MEK)	10	U	10	ug/L		04/13/22 11:57	1
Carbon disulfide	1.0	U	1.0	ug/L		04/13/22 11:57	1
Carbon tetrachloride	1.0	U	1.0	ug/L		04/13/22 11:57	1
Chlorobenzene	1.0	U	1.0	ug/L		04/13/22 11:57	1
Chloroethane	1.0	U	1.0	ug/L		04/13/22 11:57	1
Chloroform	1.0	U	1.0	ug/L		04/13/22 11:57	1
Chloromethane	1.0	U	1.0	ug/L		04/13/22 11:57	1
1,1-Dichloroethane	1.0	U	1.0	ug/L		04/13/22 11:57	1
1,2-Dichloroethane	1.0	U	1.0	ug/L		04/13/22 11:57	1
1,1-Dichloroethene	1.0	U	1.0	ug/L		04/13/22 11:57	1
1,2-Dichloropropane	1.0	U	1.0	ug/L		04/13/22 11:57	1
cis-1,3-Dichloropropene	1.0	U	1.0	ug/L		04/13/22 11:57	1
trans-1,3-Dichloropropene	1.0		1.0	ug/L		04/13/22 11:57	1
Ethylbenzene	1.0	U	1.0	ug/L		04/13/22 11:57	1
2-Hexanone	10		10	ug/L		04/13/22 11:57	1
Methylene Chloride	5.0	U	5.0	ug/L		04/13/22 11:57	1
4-Methyl-2-pentanone (MIBK)	10		10	ug/L		04/13/22 11:57	1
Styrene	1.0		1.0	ug/L		04/13/22 11:57	1
1,1,2,2-Tetrachloroethane	1.0		1.0	ug/L		04/13/22 11:57	1
Tetrachloroethene	1.0		1.0	ug/L		04/13/22 11:57	· · · · · · · 1
Toluene	1.0		1.0	ug/L		04/13/22 11:57	1
Trichloroethene	1.0		1.0	ug/L		04/13/22 11:57	1
Vinyl chloride	1.0		1.0	ug/L		04/13/22 11:57	· · · · · · · · · · · · · · · · · · ·
Xylenes, Total	2.0		2.0	ug/L		04/13/22 11:57	1
1,1,1-Trichloroethane	1.0		1.0	ug/L		04/13/22 11:57	1
1,1,2-Trichloroethane	1.0		1.0	ug/L		04/13/22 11:57	
1,2-Dibromo-3-Chloropropane	2.0		2.0			04/13/22 11:57	1
1.2-Dibromoethane	1.0		1.0	ug/L		04/13/22 11:57	1
Dichlorodifluoromethane	1.0		1.0	ug/L		04/13/22 11:57	1
cis-1,2-Dichloroethene	1.0		1.0	ug/L		04/13/22 11:57	1
-				ug/L			1
trans-1,2-Dichloroethene	1.0		1.0	ug/L		04/13/22 11:57	1
Isopropylbenzene	1.0		1.0	ug/L		04/13/22 11:57	1
Methyl tert-butyl ether	1.0		1.0	ug/L		04/13/22 11:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0		1.0	ug/L		04/13/22 11:57	
1,2,4-Trichlorobenzene	1.0		1.0	ug/L		04/13/22 11:57	1
1,2-Dichlorobenzene	1.0		1.0	ug/L		04/13/22 11:57	1
1,3-Dichlorobenzene	1.0		1.0	ug/L		04/13/22 11:57	
1,4-Dichlorobenzene	1.0		1.0	ug/L		04/13/22 11:57	1
Trichlorofluoromethane	1.0		1.0	ug/L		04/13/22 11:57	1
Dibromochloromethane	1.0	U	1.0	ug/L		04/13/22 11:57	1
	MB	MB					
Surrogate	%Recovery		Limits		Prepared	Analyzed	Dil Fac

Eurofins Canton

04/13/22 11:57

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Client: ZF Active Safety and Electronics LLC

Project/Site: TRW Milford

Job ID: 240-164831-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-522562/8

Matrix: Water

Analysis Batch: 522562

Client Sample ID: Method Blank

Prep Type: Total/NA

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	80		56 - 136		04/13/22 11:57	1
Toluene-d8 (Surr)	83		78 - 122		04/13/22 11:57	1
Dibromofluoromethane (Surr)	84		73 - 120		04/13/22 11:57	1

Lab Sample ID: LCS 240-522562/5

Matrix: Water

ne

Analysis Batch: 522562

Client Sample ID:	Lab Control Sample
	Prep Type: Total/NA

%Rac

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Acetone	40.0	28.8		ug/L		72	50 - 149	
Benzene	20.0	19.0		ug/L		95	77 - 123	
Bromodichloromethane	20.0	16.9		ug/L		84	69 - 126	
Bromoform	20.0	14.3		ug/L		72	57 - 129	
Bromomethane	20.0	18.0		ug/L		90	36 - 142	
2-Butanone (MEK)	40.0	29.3		ug/L		73	54 - 156	
Carbon disulfide	20.0	16.9		ug/L		84	43 - 140	
Carbon tetrachloride	20.0	18.3		ug/L		91	55 - 137	
Chlorobenzene	20.0	18.9		ug/L		95	80 - 121	
Chloroethane	20.0	17.3		ug/L		87	38 - 152	
Chloroform	20.0	18.4		ug/L		92	74 - 122	
Chloromethane	20.0	17.8		ug/L		89	47 - 143	
1,1-Dichloroethane	20.0	16.8		ug/L		84	72 - 127	
1,2-Dichloroethane	20.0	16.7		ug/L		84	66 - 128	
1,1-Dichloroethene	20.0	21.4		ug/L		107	63 - 134	
1,2-Dichloropropane	20.0	17.6		ug/L		88	75 - 133	
cis-1,3-Dichloropropene	20.0	16.9		ug/L		85	64 - 130	
trans-1,3-Dichloropropene	20.0	14.7		ug/L		73	57 - 129	
Ethylbenzene	20.0	18.4		ug/L		92	80 - 121	
2-Hexanone	40.0	27.0		ug/L		67	43 - 167	
Methylene Chloride	20.0	19.7		ug/L		98	71 - 125	
4-Methyl-2-pentanone (MIBK)	40.0	28.9		ug/L		72	46 - 158	
Styrene	20.0	17.9		ug/L		89	80 - 135	
1,1,2,2-Tetrachloroethane	20.0	17.6		ug/L		88	58 - 157	
Tetrachloroethene	20.0	19.2		ug/L		96	76 - 123	
Toluene	20.0	17.6		ug/L		88	80 - 123	
Trichloroethene	20.0	19.9		ug/L		100	70 - 122	
Vinyl chloride	20.0	18.8		ug/L		94	60 - 144	
Xylenes, Total	40.0	36.7		ug/L		92	80 - 121	
1,1,1-Trichloroethane	20.0	17.9		ug/L		90	64 - 131	
1,1,2-Trichloroethane	20.0	17.4		ug/L		87	70 - 138	
1,2-Dibromo-3-Chloropropane	20.0	13.3		ug/L		67	53 - 135	
1,2-Dibromoethane	20.0	17.6		ug/L		88	71 - 134	
Dichlorodifluoromethane	20.0	22.4		ug/L		112	34 - 153	
cis-1,2-Dichloroethene	20.0	19.6		ug/L		98	77 - 123	
trans-1,2-Dichloroethene	20.0	19.1		ug/L		96	75 - 124	
Isopropylbenzene	20.0	18.4		ug/L		92	74 - 128	
Methyl tert-butyl ether	20.0	16.7		ug/L		84	65 - 126	
1,1,2-Trichloro-1,2,2-trifluoroetha	20.0	21.5		ug/L		108	51 - 146	

Eurofins Canton

Client: ZF Active Safety and Electronics LLC

Project/Site: TRW Milford

Job ID: 240-164831-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-522562/5

Matrix: Water

Analysis Batch: 522562

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,2,4-Trichlorobenzene	20.0	17.2		ug/L		86	44 - 147	
1,2-Dichlorobenzene	20.0	19.1		ug/L		96	78 - 120	
1,3-Dichlorobenzene	20.0	18.2		ug/L		91	80 - 120	
1,4-Dichlorobenzene	20.0	18.4		ug/L		92	80 - 120	
Trichlorofluoromethane	20.0	20.1		ug/L		101	30 - 170	
Dibromochloromethane	20.0	15.8		ug/L		79	70 - 124	
m-Xylene & p-Xylene	20.0	18.3		ug/L		92	80 - 120	
o-Xylene	20.0	18.4		ug/L		92	80 - 123	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	74		62 - 137
4-Bromofluorobenzene (Surr)	86		56 ₋ 136
Toluene-d8 (Surr)	80		78 - 122
Dibromofluoromethane (Surr)	87		73 - 120

QC Association Summary

Client: ZF Active Safety and Electronics LLC Job ID: 240-164831-1

Project/Site: TRW Milford

GC/MS VOA

Analysis Batch: 522562

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-164831-1	OW-16D2_040822	Total/NA	Water	8260B	
240-164831-2	EQUIPMENT BLANK_040822	Total/NA	Water	8260B	
240-164831-3	FIELD BLANK_040822	Total/NA	Water	8260B	
240-164831-4	TRIP BLANK	Total/NA	Water	8260B	
MB 240-522562/8	Method Blank	Total/NA	Water	8260B	
LCS 240-522562/5	Lab Control Sample	Total/NA	Water	8260B	

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Lab Chronicle

Client: ZF Active Safety and Electronics LLC

Project/Site: TRW Milford

Client Sample ID: OW-16D2 040822

Lab Sample ID: 240-164831-1 Date Collected: 04/08/22 11:35

Matrix: Water

Matrix: Water

Job ID: 240-164831-1

Date Received: 04/09/22 08:00

Batch Dilution Batch Batch **Prepared** Method or Analyzed **Prep Type** Type Run **Factor** Number Analyst Lab Total/NA Analysis 8260B 522562 04/13/22 15:59 LEE TAL CAN

Client Sample ID: EQUIPMENT BLANK 040822

Lab Sample ID: 240-164831-2

Date Collected: 04/08/22 11:50 Date Received: 04/09/22 08:00

Batch Batch Dilution **Batch** Prepared **Prep Type** Type Method Run Factor Number or Analyzed Analyst Lab Total/NA Analysis 8260B 522562 04/13/22 16:24 LEE TAL CAN

Client Sample ID: FIELD BLANK_040822

Lab Sample ID: 240-164831-3 Date Collected: 04/08/22 10:35

Matrix: Water

Date Received: 04/09/22 08:00

Batch Batch Dilution Batch **Prepared Prep Type** Method **Factor** Number or Analyzed Type Run Analyst Lab TAL CAN Total/NA Analysis 8260B 522562 04/13/22 16:49 LEE

Client Sample ID: TRIP BLANK Lab Sample ID: 240-164831-4

Date Collected: 04/08/22 10:35 **Matrix: Water**

Date Received: 04/09/22 08:00

Batch **Batch** Dilution Batch **Prepared Prep Type** Method Run Factor Number or Analyzed Analyst Type Lab Analysis 8260B 522562 04/13/22 17:14 LEE TAL CAN Total/NA

Laboratory References:

TAL CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: ZF Active Safety and Electronics LLC

Project/Site: TRW Milford

Job ID: 240-164831-1

Laboratory: Eurofins Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date	
California	State	2927	02-27-23	
Connecticut	State	PH-0590	12-31-23	
Florida	NELAP	E87225	06-30-22	
Georgia	State	4062	02-23-22 *	
Illinois	NELAP	200004	07-31-22	
lowa	State	421	06-01-23	
Kansas	NELAP	E-10336	04-30-22	
Kentucky (UST)	State	112225	02-23-22 *	
Kentucky (WW)	State	KY98016	12-31-22	
Minnesota	NELAP	039-999-348	12-31-22	
Minnesota (Petrofund)	State	3506	08-01-23	
New Jersey	NELAP	OH001	11-06-22	
New York	NELAP	10975	04-01-23	
Ohio	State	8303	02-23-23	
Ohio VAP	State	CL0024	02-27-23	
Oregon	NELAP	4062	02-27-23	
Pennsylvania	NELAP	68-00340	08-31-22	
Texas	NELAP	T104704517-22-16	08-31-22	
Virginia	NELAP	11570	09-14-22	
Washington	State	C971	01-12-23	
West Virginia DEP	State	210	12-31-22	

 $^{^{\}star} \ \text{Accreditation/Certification renewal pending - accreditation/certification considered valid}.$

Eurofins Canton

Reliminished by:

Date Lime

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Date Time

Preservatives Code: 0 = None; 1 = HCL; 2 = HNO3; 3 = H2SO4; 4 = NaOH; 5 = Zn. Acetate; 6 = MeOH; 7 = NaHSO4; 8 = Other (specify)

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were further preserved in the laboratory.

Preservative(s) added/Lot number(s):

20. SAMPLE PRESERVATION

VOA Sample Preservation - Date/Time VOAs Frozen:

Sample(s)

Time preserved:

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Environment Testing America

ANALYTICAL REPORT

Eurofins Canton 180 S. Van Buren Avenue Barberton, OH 44203 Tel: (330)497-9396

Laboratory Job ID: 240-165203-1

Client Project/Site: Milford

For:

ZF Active Safety and Electronics LLC Tech 2 12025 Tech Center Drive Livonia, Michigan 48150

Attn: Scott Detwiler

Ade Del Your

Authorized for release by: 4/26/2022 9:29:11 AM

Michael DelMonico, Project Manager I (330)497-9396

Michael.DelMonico@et.eurofinsus.com

LINKS

Review your project results through

Total Access

Have a Question?



Visit us at:

www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ZF Active Safety and Electronics LLC

Job ID: 240-165203-1 Project/Site: Milford

Qualifiers

GC/MS VOA

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.

Listed under the "D" column to designate that the result is reported on a dry weight basis

Percent Recovery %R **CFL** Contains Free Liquid CFU Colony Forming Unit CNF Contains No Free Liquid

Duplicate Error Ratio (normalized absolute difference) **DER**

Dil Fac **Dilution Factor**

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

Estimated Detection Limit (Dioxin) **EDL** LOD Limit of Detection (DoD/DOE) LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level" MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit MLMinimum Level (Dioxin) MPN Most Probable Number Method Quantitation Limit MQL

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive QC **Quality Control**

Relative Error Ratio (Radiochemistry) **RER**

Reporting Limit or Requested Limit (Radiochemistry) RL

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin) **TEQ** Toxicity Equivalent Quotient (Dioxin)

Too Numerous To Count **TNTC**

Case Narrative

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Job ID: 240-165203-1

Job ID: 240-165203-1

Laboratory: Eurofins Canton

Narrative

Job Narrative 240-165203-1

Comments

No additional comments.

Receipt

The samples were received on 4/19/2022 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.5° C.

GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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Method Summary

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Job ID: 240-165203-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
5030B	Purge and Trap	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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Sample Summary

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Lab Sample ID Client Sample ID Matrix Collected Received 240-165203-1 OW-16D2_041822 Water 04/18/22 10:55 04/19/22 10:00 240-165203-2 EQUIPMENT BLANK_041822 Water 04/18/22 11:20 04/19/22 10:00 FIELD BLANK_041822 Water 04/18/22 10:35 04/19/22 10:00 240-165203-3 TRIP BLANK 04/18/22 00:00 04/19/22 10:00 240-165203-4 Water

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Job ID: 240-165203-1

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Detection Summary

Client: ZF Active Safety and Electronics LLC Job ID: 240-165203-1

Project/Site: Milford

Client Sample ID: OW-16D2	_041822	Lab Sample ID: 240-165203-1

Analyte	Result Qualifier	RL	Unit	Dil Fac) Method	Prep Type
1,1-Dichloroethane	2.4	1.0	ug/L		8260B	Total/NA
cis-1,2-Dichloroethene	16	1.0	ug/L	1	8260B	Total/NA
trans-1,2-Dichloroethene	1.2	1.0	ug/L	1	8260B	Total/NA

Client Sample ID: EQUIPMENT BLANK 041822	Lab Sample ID: 240-165203-2
Choin Campic ID: Egon MEITI DEMINI CTICEE	

No Detections.

Client Sample ID: FIELD BLANK_041822 Lab Sample ID: 240-165203-3

No Detections.

Client Sample ID: TRIP BLANK Lab Sample ID: 240-165203-4

No Detections.

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Toluene-d8 (Surr)

Client Sample ID: OW-16D2_041822

Date Collected: 04/18/22 10:55 Date Received: 04/19/22 10:00 Job ID: 240-165203-1

Lab Sample ID: 240-165203-1

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	ug/L			04/21/22 15:37	1
Benzene	1.0	U	1.0	ug/L			04/21/22 15:37	1
Bromodichloromethane	1.0	U	1.0	ug/L			04/21/22 15:37	1
Bromoform	1.0	U	1.0	ug/L			04/21/22 15:37	1
Bromomethane	1.0	U	1.0	ug/L			04/21/22 15:37	1
2-Butanone (MEK)	10	U	10	ug/L			04/21/22 15:37	1
Carbon disulfide	1.0	U	1.0	ug/L			04/21/22 15:37	1
Carbon tetrachloride	1.0	U	1.0	ug/L			04/21/22 15:37	1
Chlorobenzene	1.0	U	1.0	ug/L			04/21/22 15:37	1
Chloroethane	1.0	U	1.0	ug/L			04/21/22 15:37	1
Chloroform	1.0	U	1.0	ug/L			04/21/22 15:37	1
Chloromethane	1.0	U	1.0	ug/L			04/21/22 15:37	1
1,1-Dichloroethane	2.4		1.0	ug/L			04/21/22 15:37	1
1,2-Dichloroethane	1.0	U	1.0	ug/L			04/21/22 15:37	1
1,1-Dichloroethene	1.0		1.0	ug/L			04/21/22 15:37	1
1,2-Dichloropropane	1.0		1.0	ug/L			04/21/22 15:37	
cis-1,3-Dichloropropene	1.0		1.0	ug/L			04/21/22 15:37	1
trans-1,3-Dichloropropene	1.0		1.0	ug/L			04/21/22 15:37	1
Ethylbenzene	1.0		1.0	ug/L			04/21/22 15:37	1
2-Hexanone	10		10	ug/L			04/21/22 15:37	1
Methylene Chloride	5.0		5.0	ug/L			04/21/22 15:37	
4-Methyl-2-pentanone (MIBK)	10		10	ug/L			04/21/22 15:37	
Styrene	1.0		1.0	ug/L			04/21/22 15:37	1
1,1,2,2-Tetrachloroethane	1.0		1.0	ug/L			04/21/22 15:37	1
Tetrachloroethene	1.0		1.0	ug/L			04/21/22 15:37	' 1
Toluene	1.0		1.0	ug/L			04/21/22 15:37	1
Trichloroethene	1.0		1.0	ug/L			04/21/22 15:37	1
Vinyl chloride	1.0		1.0	ug/L			04/21/22 15:37	 1
Xylenes, Total	2.0		2.0	ug/L			04/21/22 15:37	1
1,1,1-Trichloroethane	1.0		1.0	ug/L			04/21/22 15:37	1
1,1,2-Trichloroethane	1.0		1.0				04/21/22 15:37	 1
1,2-Dibromo-3-Chloropropane	2.0		2.0	ug/L ug/L			04/21/22 15:37	1
1,2-Dibromoethane	1.0		1.0	•			04/21/22 15:37	
Dichlorodifluoromethane				ug/L				
	1.0	U	1.0	ug/L			04/21/22 15:37 04/21/22 15:37	1
cis-1,2-Dichloroethene	16		1.0	ug/L			04/21/22 15:37	1
trans-1,2-Dichloroethene	1.2		1.0	ug/L				ا 1
Isopropylbenzene	1.0		1.0	ug/L			04/21/22 15:37	1
Methyl tert-butyl ether	1.0		1.0	ug/L			04/21/22 15:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0		1.0	ug/L			04/21/22 15:37	
1,2,4-Trichlorobenzene	1.0		1.0	ug/L			04/21/22 15:37	1
1,2-Dichlorobenzene	1.0		1.0	ug/L			04/21/22 15:37	1
1,3-Dichlarahanana	1.0		1.0	ug/L			04/21/22 15:37	1
1,4-Dichlorobenzene	1.0		1.0	ug/L			04/21/22 15:37	1
Trichlorofluoromethane	1.0		1.0	ug/L			04/21/22 15:37	1
Dibromochloromethane	1.0	U	1.0	ug/L			04/21/22 15:37	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	76		62 - 137		_		04/21/22 15:37	1
4-Bromofluorobenzene (Surr)	78		56 - 136				04/21/22 15:37	1
Tal	22		70 400				04/04/00 45:07	-

Eurofins Canton

04/21/22 15:37

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4/26/2022

3

4

6

8

10

12

Client: ZF Active Safety and Electronics LLC

Job ID: 240-165203-1

Project/Site: Milford

Date Collected: 04/18/22 10:55 East Stample 15: 240 166266-1

Date Received: 04/19/22 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

4

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13

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Client Sample ID: EQUIPMENT BLANK_041822

Date Collected: 04/18/22 11:20 Date Received: 04/19/22 10:00

4-Bromofluorobenzene (Surr)

Toluene-d8 (Surr)

Lab Sample ID: 240-165203-2

Matrix: Water

Job ID: 240-165203-1

Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Acetone	10	U	10	ug/L			04/21/22 16:02	
Benzene	1.0	U	1.0	ug/L			04/21/22 16:02	
Bromodichloromethane	1.0	U	1.0	ug/L			04/21/22 16:02	
Bromoform	1.0	U	1.0	ug/L			04/21/22 16:02	
Bromomethane	1.0	U	1.0	ug/L			04/21/22 16:02	
2-Butanone (MEK)	10	U	10	ug/L			04/21/22 16:02	
Carbon disulfide	1.0	U	1.0	ug/L			04/21/22 16:02	
Carbon tetrachloride	1.0	U	1.0	ug/L			04/21/22 16:02	
Chlorobenzene	1.0	U	1.0	ug/L			04/21/22 16:02	
Chloroethane	1.0	U	1.0	ug/L			04/21/22 16:02	
Chloroform	1.0	U	1.0	ug/L			04/21/22 16:02	
Chloromethane	1.0	U	1.0	ug/L			04/21/22 16:02	
1,1-Dichloroethane	1.0	U	1.0	ug/L			04/21/22 16:02	
1,2-Dichloroethane	1.0		1.0	ug/L			04/21/22 16:02	
1,1-Dichloroethene	1.0		1.0	ug/L			04/21/22 16:02	
1,2-Dichloropropane	1.0		1.0	ug/L			04/21/22 16:02	
cis-1,3-Dichloropropene	1.0		1.0	ug/L			04/21/22 16:02	
trans-1,3-Dichloropropene	1.0		1.0	ug/L			04/21/22 16:02	
Ethylbenzene	1.0		1.0	ug/L			04/21/22 16:02	
2-Hexanone	10		10	ug/L			04/21/22 16:02	
Methylene Chloride	5.0		5.0	ug/L			04/21/22 16:02	
4-Methyl-2-pentanone (MIBK)			10	ug/L			04/21/22 16:02	
Styrene	1.0		1.0	ug/L			04/21/22 16:02	
1,1,2,2-Tetrachloroethane	1.0		1.0	ug/L			04/21/22 16:02	
Tetrachloroethene	1.0		1.0	ug/L			04/21/22 16:02	
Foluene	1.0		1.0	•			04/21/22 16:02	
Trichloroethene	1.0		1.0	ug/L			04/21/22 16:02	
				ug/L				
Vinyl chloride	1.0 2.0		1.0	ug/L			04/21/22 16:02 04/21/22 16:02	
Xylenes, Total	1.0		2.0	ug/L				
1,1,1-Trichloroethane			1.0	ug/L			04/21/22 16:02	
1,1,2-Trichloroethane	1.0		1.0	ug/L			04/21/22 16:02	
1,2-Dibromo-3-Chloropropane	2.0		2.0	ug/L			04/21/22 16:02	
1,2-Dibromoethane	1.0		1.0	ug/L			04/21/22 16:02	
Dichlorodifluoromethane	1.0		1.0	ug/L			04/21/22 16:02	
cis-1,2-Dichloroethene	1.0		1.0	ug/L			04/21/22 16:02	
trans-1,2-Dichloroethene	1.0		1.0	ug/L			04/21/22 16:02	
Isopropylbenzene	1.0		1.0	ug/L			04/21/22 16:02	
Methyl tert-butyl ether	1.0		1.0	ug/L			04/21/22 16:02	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0		1.0	ug/L			04/21/22 16:02	
1,2,4-Trichlorobenzene	1.0		1.0	ug/L			04/21/22 16:02	
1,2-Dichlorobenzene	1.0		1.0	ug/L			04/21/22 16:02	
1,3-Dichlorobenzene	1.0		1.0	ug/L			04/21/22 16:02	
1,4-Dichlorobenzene	1.0		1.0	ug/L			04/21/22 16:02	
Trichlorofluoromethane	1.0		1.0	ug/L			04/21/22 16:02	
Dibromochloromethane	1.0	U	1.0	ug/L			04/21/22 16:02	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4 (Surr)	77		62 - 137		•		04/21/22 16:02	

Eurofins Canton

04/21/22 16:02

04/21/22 16:02

56 - 136

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Client: ZF Active Safety and Electronics LLC Job ID: 240-165203-1

Project/Site: Milford

Date Received: 04/19/22 10:00

Client Sample ID: EQUIPMENT BLANK_041822 Lab Sample ID: 240-165203-2

Date Collected: 04/18/22 11:20

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

%Recovery Qualifier Limits Prepared Analyzed Dil Fac Dibromofluoromethane (Surr) 88 73 - 120 04/21/22 16:02

Client: ZF Active Safety and Electronics LLC Job ID: 240-165203-1

Project/Site: Milford

1,2-Dichloroethane-d4 (Surr)

4-Bromofluorobenzene (Surr)

Toluene-d8 (Surr)

Client Sample ID: FIELD BLANK_041822

Lab Sample ID: 240-165203-3 Date Collected: 04/18/22 10:35 Date Received: 04/19/22 10:00

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Acetone 10 U 10 ugL 04/21/22 16.2 Bromodichloromethane 1.0 U 1.0 ugl. 04/21/22 16.2 Bromoform 1.0 U 1.0 ugl. 04/21/22 16.2 Bromoform 1.0 U 1.0 ugl. 04/21/22 16.2 2-Butanoe (MEK) 10 U 1.0 ugl. 04/21/22 16.2 Carbon Isulfade 1.0 U 1.0 ugl. 04/21/22 16.2 Carbon tetrachloride 1.0 U 1.0 ugl. 04/21/22 16.2 Chicrobenzene 1.0 U 1.0 ugl. 04/21/22 16.2 Chicroberm 1.0 U 1.0 ugl. 04/21/22 16.2 Chloroberm 1.0 U 1.0 ugl. 04/21/22 16.2 Chlorobermae 1.0 U 1.0 ugl. 04/21/22 16.2 1,1-Dichloroberhane 1.0 U 1.0 ugl. 04/21/22 16.2 1,1-Dichloroberhane 1.0 <t< th=""><th> Dil Fac</th></t<>	Dil Fac
Bromodichloromethane	27 1
Bromoform 1.0 U 1.0 ug/L 04/21/22 16:2 Bromomethane 1.0 U 1.0 ug/L 04/21/22 16:2 Bromomethane 1.0 U 1.0 ug/L 04/21/22 16:2 Carbon tetrachloride 1.0 U 1.0 ug/L 04/21/22 16:2 Carbon disulfide 1.0 U 1.0 ug/L 04/21/22 16:2 Carbon tetrachloride 1.0 U 1.0 ug/L 04/21/22 16:2 Chlorochenzene 1.0 U 1.0 ug/L 04/21/22 16:2 Chlorochenzene 1.0 U 1.0 ug/L 04/21/22 16:2 Chlorochane 1.0 U 1.0 ug/L 04/21/22 16:2 Chlorochane 1.0 U 1.0 ug/L 04/21/22 16:2 Chloromethane 1.0 U 1.0 ug/L 04/21/22 16:2 Chlorochene 1.0 U 1.0 ug/L 04/21/22 16:2	27 1
Bromomethane 1.0 U 1.0 ug/L 04/21/22 16:2 2-Butanone (MEK) 10 U 10 ug/L 04/21/22 16:2 Carbon disulfide 1.0 U 1.0 ug/L 04/21/22 16:2 Carbon tetrachloride 1.0 U 1.0 ug/L 04/21/22 16:2 Carbon tetrachloride 1.0 U 1.0 ug/L 04/21/22 16:2 Chlorobenzene 1.0 U 1.0 ug/L 04/21/22 16:2 Chlorobenzene 1.0 U 1.0 ug/L 04/21/22 16:2 Chlorocethane 1.0 U 1.0 ug/L 04/21/22 16:2 Chlorocethane 1.0 U 1.0 ug/L 04/21/22 16:2 Chlorocethane 1.0 U 1.0 ug/L 04/21/22 16:2 1.1-Dichlorocethane 1.0 U 1.0 ug/L 04/21/22 16:2 1.1-Dichlorocethane 1.0 U 1.0 ug/L 04/21/22 16:2 1.1-Dichlorocethane 1.0 U 1.0 ug/L 04/21/22 16:2 1.2-Dichloropethane 1.0 U 1.0 ug/L 04/21/22 16:2 1.2-Dichloropethane 1.0 U 1.0 ug/L 04/21/22 16:2 1.2-Dichloropethane 1.0 U 1.0 ug/L 04/21/22 16:2 1.2-Dichloropropene 1.0 U 1.0 ug/L 04/21/22 16:2 1.1-Dichloropropene 1.0 U 1.0 ug/L 04/21/22 16:2 1.1-Dichloropenene 1.0 U 1.0 ug/L 04/21/22 16:2 1.1-Dichloropenene 1.0 U 1.0 ug/	27 1
2-Butanone (MEK)	27 1
Carbon disulfide	27 1
Carbon tetrachloride	27 1
Chlorobenzene 1.0 U 1.0 ug/L 04/21/22 16:2 Chlorotethane 1.0 U 1.0 ug/L 04/21/22 16:2 Chlorotethane 1.0 U 1.0 ug/L 04/21/22 16:2 Chloromethane 1.0 U 1.0 ug/L 04/21/22 16:2 1,1-Dichlorotethane 1.0 U 1.0 ug/L 04/21/22 16:2 1,1-Dichlorotethane 1.0 U 1.0 ug/L 04/21/22 16:2 1,1-Dichlorotethane 1.0 U 1.0 ug/L 04/21/22 16:2 1,1-Dichloropopane 1.0 U 1.0 ug/L 04/21/22 16:2 1,1-Dichloropo	27 1
Chloroethane	27 1
Chloroethane	27 1
Chloroform 1.0 U 1.0 ug/L 04/21/22 16:2 Chloromethane 1.0 U 1.0 ug/L 04/21/22 16:2 Chloromethane 1.0 U 1.0 ug/L 04/21/22 16:2 1,2-Dichloroethane 1.0 U 1.0 ug/L 04/21/22 16:2 1,2-Dichloroethane 1.0 U 1.0 ug/L 04/21/22 16:2 1,1-Dichloroethane 1.0 U 1.0 ug/L 04/21/22 16:2 1,1-Dichloropropane 1.0 U 1.0 ug/L 04/21/22 16:3 1,3-Dichloropropane 1.0 U 1.0 ug/L 04/21/22 16:3 1-3-Dichloropropene 1.0 U 1.0 ug/L 04/21/22 16:3 1-3-Dichloropropene 1.0 U 1.0 ug/L 04/21/22 16:3 1-3-Dichloropropene 1.0 U 1.0 ug/L 04/21/22 16:3 1-2-Hokanone 1.0 U 1.0 ug/L 04/21/22 16:3 1-1,1-2-Trichloroethane 1.0 U 1.0 ug/L 04/21/22 16:3 1-1,1-2-Trichloroethane 1.0 U 1.0 ug/L 04/21/22 16:3 1-1,1-Trichloroethane 1.0 U 1.0 ug/L 04/21/22 16:3 1-1,2-Trichloroethane 1.0 U 1.0 ug/L 04/21/22 16:3 1-1,2-Trichloroethane 1.0 U 1.0 ug/L 04/21/22 16:3 1-1,2-Trichloroethane 1.0 U 1.0 ug/L 04/21/22 16:3 1-1,2-Dichloroethane 1.0 U 1.0 ug/L 04/21/22 16:3 1-1,2-Trichloroethane 1.0 U 1.0 ug/L 04/21/22 16:3 1-1,2-Trichloroethane 1.0 U 1.0 ug/L 04/21/22 16:3 1-1,2-Trichloroethane 1.0 U 1.0 ug/L 04/21/22 16:3 1	27 1
Chloromethane 1.0 U 1.0 ug/L 04/21/22 16:2 1,1-Dichloroethane 1.0 U 1.0 ug/L 04/21/22 16:2 1,1-Dichloroptopane 1.0 U 1.0 ug/L 04/21/22 16:2 1,2-Dichloropropane 1.0 U 1.0 ug/L 04/21/22 16:2 1,2-Dichloropropane 1.0 U 1.0 ug/L 04/21/22 16:2 1,1-Dichloropropane 1.0 U 1.0 ug/L 04/21/22 16:2 1,2-Dibromo-3-Chloropropane 1.0 U 1.0 ug/L 04/21/22 16:2 1,1-Dichloropropane 1.0 U 1.0 ug/L 04/21/22 16:2 1,1-Dichloropropane 1.0 U 1.0 ug/L 04/21/22 16:2 1,2-Dichloropropane 1.0 U 1.0 ug/L 04/21/22 16:2 1,2-Dichloropropane 1.0 U 1.0 ug/L 04/21/22 16:2 1,2-Dichloropropane 1.0 U 1.0 ug/L 04/2	27 1
1,1-Dichloroethane	27 1
1,2-Dichloroethane 1.0 U 1.0 ug/L 04/21/22 16:2 1,1-Dichloroethene 1.0 U 1.0 ug/L 04/21/22 16:2 cis-1,3-Dichloropropene 1.0 U 1.0 ug/L 04/21/22 16:2 cis-1,3-Dichloropropene 1.0 U 1.0 ug/L 04/21/22 16:2 Ethylbenzene 1.0 U 1.0 ug/L 04/21/22 16:2 Ethylbenzene 1.0 U 1.0 ug/L 04/21/22 16:2 Hethylene Chloride 5.0 U 5.0 ug/L 04/21/22 16:2 4-Methyl-2-pentanone (MIBK) 10 U 1.0 ug/L 04/21/22 16:2 5tyrene 1.0 U 1.0 ug/L 04/21/22 16:2 5tyrene 1.0 U 1.0 ug/L 04/21/22 16:2 Tetrachloroethane 1.0 U 1.0 ug/L 04/21/22 16:2 Trichloroethane 1.0 U 1.0 ug/L 04/21/22 16:2 Vylng chloride 1.0 U 1.0 ug/L 04/21/22 16:2 <t< td=""><td>27 1</td></t<>	27 1
1,1-Dichloroethene 1.0 U 1.0 ug/L 04/21/22 16:2 1,2-Dichloropropane 1.0 U 1.0 ug/L 04/21/22 16:2 1:s-1,3-Dichloropropene 1.0 U 1.0 ug/L 04/21/22 16:2 trans-1,3-Dichloropropene 1.0 U 1.0 ug/L 04/21/22 16:2 Ethylbenzene 1.0 U 1.0 ug/L 04/21/22 16:2 2-Hexanone 10 U 1.0 ug/L 04/21/22 16:2 4-Methyl-2-pentanone (MIBK) 10 U 1.0 ug/L 04/21/22 16:2 4-Methyl-2-pentanone (MIBK) 10 U 1.0 ug/L 04/21/22 16:2 Styrene 1.0 U 1.0 ug/L 04/21/22 16:2 Styrene 1.0 U 1.0 ug/L 04/21/22 16:2 Tetrachloroethene 1.0 U 1.0 ug/L 04/21/22 16:2 Tolluene 1.0 U 1.0 ug/L 04/21/22 16:2 Tichloroethene 1.0 U 1.0 ug/L 04/21/22 16:2 <	
1,2-Dichloropropane 1.0 U 1.0 ug/L 04/21/22 16:2 6:3-1,3-Dichloropropene 1.0 U 1.0 ug/L 04/21/22 16:2 6:2-1,3-Dichloropropene 1.0 U 1.0 ug/L 04/21/22 16:2 6:2-1 6:4-1 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 <	
1.0 U	
trans-1,3-Dichloropropene 1.0 U 1.0 ug/L 04/21/22 16:2 Ethylbenzene 1.0 U 1.0 ug/L 04/21/22 16:2 Ethylbenzene 1.0 U 1.0 ug/L 04/21/22 16:2 Methylene Chloride 5.0 U 5.0 ug/L 04/21/22 16:2 Methylene Chloride 5.0 U 5.0 ug/L 04/21/22 16:2 Styrene 1.0 U 1.0 ug/L 04/21/22 16:2 Tetrachloroethane 1.0 U 1.0 ug/L 04/21/22 16:2 Trichloroethene 1.0 U 1.0 ug/L 04/21/22 16:2 Trichloroethane 1.0 U 1.0 ug/L 04/21/22 16:2 Dichlorodifluoromethane 1.0 U 1.0 ug/L 04/21/22 16:2 Dichlorodenzene 1.0 U 1.0 ug/L 04/21/22 16:2 Dichlorodenzene 1.0 U 1.0 ug/L 04/21/22 16:2 Dichlorodenzene 1.0 U 1.0 ug/L 04/21/22 16:2 Dichlorobenzene 1.0 U 1.0 ug/L 04/21/22 16:2 Dichlorobenzene 1.0 U 1.0 ug/L 04/21/22 16:2 Dichlorobenzene 1.0 U 1.0 ug/L 04/21/22 16:2	
Ethylbenzene 1.0 U 1.0 ug/L 04/21/22 16:2 2-Hexanone 10 U 10 ug/L 04/21/22 16:2 4-Methylene Chloride 5.0 U 5.0 ug/L 04/21/22 16:2 Styrene 1.0 U 10 ug/L 04/21/22 16:2 Styrene 1.0 U 1.0 ug/L 04/21/22 16:2 Styrene 1.0 U 1.0 ug/L 04/21/22 16:2 Trichloroethane 1.0 U 1.0 ug/L 04/21/22 16:2 Trichloroethene 1.0 U 1.0 ug/L 04/21/22 16:2 Trichloroethane 1.0 U 1.0 ug/L 04/21/22 16:2 Trichloroethene 1.0 U 1.0 ug/L 04/21/22 16:2	
2-Hexanone 10 U 10 ug/L 04/21/22 16:2 Methylene Chloride 5.0 U 5.0 ug/L 04/21/22 16:2 4-Methyl-2-pentanone (MIBK) 10 U 10 ug/L 04/21/22 16:2 Styrene 1.0 U 1.0 ug/L 04/21/22 16:2 Styrene 1.0 U 1.0 ug/L 04/21/22 16:2 Tetrachloroethane 1.0 U 1.0 ug/L 04/21/22 16:2 Tetrachloroethane 1.0 U 1.0 ug/L 04/21/22 16:2 Toluene 1.0 U 1.0 ug/L 04/21/22 16:2 Trichloroethene 1.0 U 1.0 ug/L 04/21/22 16:2 Trichloroethane 1.0 U 1.0 ug/L 04/21/22 16:2 Trichloroethene 1.0 U 1.0 ug/L 04/21/22 16:2 Trichloroethene 1.0 U 1.0 ug/L 04/21/22 16:2 Trichloroethene 1.0 U 1.0 ug/L 04/21/22 16:2 Trans-1,2-Dichloroethene 1.0 U 1.0 ug/L 04/21/22 16:2	
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	27 1
Surrogate %Recovery Qualifier Limits Prepared Analyzed	

Eurofins Canton

04/21/22 16:27

04/21/22 16:27

62 - 137

56 - 136

78 - 122

76

80

85

04/21/22 16:27

Client: ZF Active Safety and Electronics LLC Job ID: 240-165203-1

Project/Site: Milford

Client Sample ID: FIELD BLANK_041822 Lab Sample ID: 240-165203-3

Date Collected: 04/18/22 10:35

Matrix: Water

Date Received: 04/19/22 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

2

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6

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9

11

13

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Client Sample ID: TRIP BLANK

Date Collected: 04/18/22 00:00 Date Received: 04/19/22 10:00

4-Bromofluorobenzene (Surr)

Toluene-d8 (Surr)

Lab Sample ID: 240-165203-4

Matrix: Water

Job ID: 240-165203-1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	ug/L		-	04/21/22 16:52	1
Benzene	1.0	U	1.0	ug/L			04/21/22 16:52	1
Bromodichloromethane	1.0	U	1.0	ug/L			04/21/22 16:52	1
Bromoform	1.0	U	1.0	ug/L			04/21/22 16:52	1
Bromomethane	1.0	U	1.0	ug/L			04/21/22 16:52	1
2-Butanone (MEK)	10	U	10	ug/L			04/21/22 16:52	1
Carbon disulfide	1.0	U	1.0	ug/L			04/21/22 16:52	1
Carbon tetrachloride	1.0	U	1.0	ug/L			04/21/22 16:52	1
Chlorobenzene	1.0	U	1.0	ug/L			04/21/22 16:52	1
Chloroethane	1.0	U	1.0	ug/L			04/21/22 16:52	1
Chloroform	1.0	U	1.0	ug/L			04/21/22 16:52	1
Chloromethane	1.0	U	1.0	ug/L			04/21/22 16:52	1
1,1-Dichloroethane	1.0		1.0	ug/L			04/21/22 16:52	1
1,2-Dichloroethane	1.0		1.0	ug/L			04/21/22 16:52	1
1,1-Dichloroethene	1.0		1.0	ug/L			04/21/22 16:52	1
1,2-Dichloropropane	1.0		1.0	ug/L			04/21/22 16:52	1
cis-1,3-Dichloropropene	1.0		1.0	ug/L			04/21/22 16:52	1
trans-1,3-Dichloropropene	1.0		1.0	ug/L			04/21/22 16:52	1
Ethylbenzene	1.0		1.0	ug/L			04/21/22 16:52	1
2-Hexanone	10		10	ug/L			04/21/22 16:52	1
Methylene Chloride	5.0		5.0	ug/L			04/21/22 16:52	1
4-Methyl-2-pentanone (MIBK)	10		10	ug/L			04/21/22 16:52	· · · · · · · · · · · · · · · · · · ·
Styrene	1.0		1.0	ug/L			04/21/22 16:52	1
1,1,2,2-Tetrachloroethane	1.0		1.0	ug/L			04/21/22 16:52	1
Tetrachloroethene	1.0		1.0	ug/L			04/21/22 16:52	· · · · · · · · · · · · · · · · · · ·
Toluene	1.0		1.0	ug/L			04/21/22 16:52	1
Trichloroethene	1.0		1.0	ug/L			04/21/22 16:52	1
Vinyl chloride	1.0		1.0	ug/L			04/21/22 16:52	· 1
Xylenes, Total	2.0		2.0	ug/L			04/21/22 16:52	1
1,1,1-Trichloroethane	1.0		1.0	ug/L			04/21/22 16:52	1
1,1,2-Trichloroethane	1.0		1.0	ug/L			04/21/22 16:52	· · · · · · · · · · · · · · · · · · ·
1,2-Dibromo-3-Chloropropane	2.0		2.0	ug/L			04/21/22 16:52	1
1,2-Dibromoethane	1.0		1.0	ug/L			04/21/22 16:52	1
Dichlorodifluoromethane	1.0		1.0	ug/L			04/21/22 16:52	 1
cis-1,2-Dichloroethene	1.0		1.0	ug/L			04/21/22 16:52	1
trans-1,2-Dichloroethene	1.0		1.0	ug/L			04/21/22 16:52	1
Isopropylbenzene	1.0		1.0	ug/L			04/21/22 16:52	
Methyl tert-butyl ether	1.0		1.0				04/21/22 16:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0		1.0	ug/L ug/L			04/21/22 16:52	1
1,2,4-Trichlorobenzene	1.0		1.0	ug/L			04/21/22 16:52	' 1
	1.0		1.0				04/21/22 16:52	
1,2-Dichlorobenzene 1,3-Dichlorobenzene	1.0		1.0	ug/L ug/L			04/21/22 16:52	1
1,4-Dichlorobenzene Trichlorofluoromethane	1.0		1.0	ug/L			04/21/22 16:52	1
Trichlorofluoromethane Dibromochloromethane	1.0		1.0	ug/L			04/21/22 16:52	1
Dibiomocnioromethane	1.0	U	1.0	ug/L			04/21/22 16:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	74	****	62 - 137		-	-1	04/21/22 16:52	1
			50 100				0.4/0.4/0.0 4.0 5.0	

Eurofins Canton

04/21/22 16:52

04/21/22 16:52

Page 14 of 24

56 - 136

78 - 122

79

82

4/26/2022

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10

Client: ZF Active Safety and Electronics LLC Job ID: 240-165203-1

Project/Site: Milford

Client Sample ID: TRIP BLANK Lab Sample ID: 240-165203-4

Date Collected: 04/18/22 00:00 East Sample 15: 240-103203-4

Date Received: 04/19/22 10:00 Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

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Surrogate Summary

Client: ZF Active Safety and Electronics LLC Job ID: 240-165203-1

Project/Site: Milford

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water Prep Type: Total/NA

0-165203-1 OW-16D2_041822 76 78 82 91 0-165203-2 EQUIPMENT BLANK_041822 77 82 82 88 0-165203-3 FIELD BLANK_041822 76 80 85 88				Pe	ercent Surre	ogate Reco
0-165203-1 OW-16D2_041822 76 78 82 91 0-165203-2 EQUIPMENT BLANK_041822 77 82 82 88 0-165203-3 FIELD BLANK_041822 76 80 85 88			DCA	BFB	TOL	DBFM
0-165203-2 EQUIPMENT BLANK_041822 77 82 82 88 0-165203-3 FIELD BLANK_041822 76 80 85 88	Lab Sample ID	Client Sample ID	(62-137)	(56-136)	(78-122)	(73-120)
0-165203-3 FIELD BLANK_041822 76 80 85 88	240-165203-1	OW-16D2_041822	76	78	82	91
	240-165203-2	EQUIPMENT BLANK_041822	77	82	82	88
	240-165203-3	FIELD BLANK_041822	76	80	85	88
0-165203-4 TRIP BLANK 74 79 82 86	240-165203-4	TRIP BLANK	74	79	82	86
S 240-523444/5 Lab Control Sample 73 86 81 90	LCS 240-523444/5	Lab Control Sample	73	86	81	90
3 240-523444/8 Method Blank 78 78 81 89	MB 240-523444/8	Method Blank	78	78	81	89

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

DBFM = Dibromofluoromethane (Surr)

Eurofins Canton

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QC Sample Results

Client: ZF Active Safety and Electronics LLC

Job ID: 240-165203-1

Project/Site: Milford

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-523444/8

Matrix: Water

Surrogate

1,2-Dichloroethane-d4 (Surr)

Client Sample ID: Method Blank Prep Type: Total/NA

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Acetone	10	U	10	ug/L			04/21/22 11:01	
Benzene	1.0	U	1.0	ug/L			04/21/22 11:01	
Bromodichloromethane	1.0	U	1.0	ug/L			04/21/22 11:01	
Bromoform	1.0	U	1.0	ug/L			04/21/22 11:01	
Bromomethane	1.0	U	1.0	ug/L			04/21/22 11:01	
2-Butanone (MEK)	10	U	10	ug/L			04/21/22 11:01	
Carbon disulfide	1.0	U	1.0	ug/L			04/21/22 11:01	
Carbon tetrachloride	1.0	U	1.0	ug/L			04/21/22 11:01	
Chlorobenzene	1.0	U	1.0	ug/L			04/21/22 11:01	
Chloroethane	1.0	U	1.0	ug/L			04/21/22 11:01	
Chloroform	1.0	U	1.0	ug/L			04/21/22 11:01	
Chloromethane	1.0	U	1.0	ug/L			04/21/22 11:01	
1,1-Dichloroethane	1.0	U	1.0	ug/L			04/21/22 11:01	
1,2-Dichloroethane	1.0	U	1.0	ug/L			04/21/22 11:01	
1,1-Dichloroethene	1.0	U	1.0	ug/L			04/21/22 11:01	
1,2-Dichloropropane	1.0	U	1.0	ug/L			04/21/22 11:01	
cis-1,3-Dichloropropene	1.0	U	1.0	ug/L			04/21/22 11:01	
rans-1,3-Dichloropropene	1.0	U	1.0	ug/L			04/21/22 11:01	
Ethylbenzene	1.0	U	1.0	ug/L			04/21/22 11:01	
2-Hexanone	10	U	10	ug/L			04/21/22 11:01	
Methylene Chloride	5.0		5.0	ug/L			04/21/22 11:01	
4-Methyl-2-pentanone (MIBK)	10		10	ug/L			04/21/22 11:01	
Styrene	1.0		1.0	ug/L			04/21/22 11:01	
1,1,2,2-Tetrachloroethane	1.0		1.0	ug/L			04/21/22 11:01	
Tetrachloroethene	1.0		1.0	ug/L			04/21/22 11:01	
Toluene	1.0		1.0	ug/L			04/21/22 11:01	
Trichloroethene	1.0		1.0	ug/L			04/21/22 11:01	
Vinyl chloride	1.0		1.0	ug/L			04/21/22 11:01	
Xylenes, Total	2.0		2.0	ug/L			04/21/22 11:01	
1,1,1-Trichloroethane	1.0		1.0	ug/L			04/21/22 11:01	
1,1,2-Trichloroethane	1.0		1.0	ug/L			04/21/22 11:01	
1,2-Dibromo-3-Chloropropane	2.0		2.0	ug/L			04/21/22 11:01	
1,2-Dibromoethane	1.0		1.0	ug/L			04/21/22 11:01	
Dichlorodifluoromethane	1.0		1.0	ug/L			04/21/22 11:01	
cis-1,2-Dichloroethene	1.0		1.0	ug/L			04/21/22 11:01	
trans-1,2-Dichloroethene	1.0		1.0	ug/L			04/21/22 11:01	
Isopropylbenzene	1.0		1.0	ug/L ug/L			04/21/22 11:01	
Methyl tert-butyl ether	1.0		1.0	ug/L ug/L			04/21/22 11:01	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0		1.0	_			04/21/22 11:01	
1,1,2-Trichloro-1,2,2-unidoroeurarie 1,2,4-Trichlorobenzene	1.0		1.0	ug/L			04/21/22 11:01	
1,2-Dichlorobenzene	1.0		1.0	ug/L			04/21/22 11:01	
	1.0			ug/L				
1,3-Dichlorobenzene			1.0	ug/L			04/21/22 11:01	
1,4-Dichlorobenzene	1.0		1.0	ug/L			04/21/22 11:01	
Trichlorofluoromethane	1.0		1.0	ug/L			04/21/22 11:01	
Dibromochloromethane	1.0		1.0	ug/L			04/21/22 11:01	

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Analyzed

04/21/22 11:01

Prepared

Limits

62 - 137

%Recovery Qualifier

78

Dil Fac

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QC Sample Results

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Job ID: 240-165203-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-523444/8

Matrix: Water

Analysis Batch: 523444

Client Sample ID: Method Blank

Prep Type: Total/NA

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	78		56 - 136		04/21/22 11:01	1
Toluene-d8 (Surr)	81		78 - 122		04/21/22 11:01	1
Dibromofluoromethane (Surr)	89		73 - 120		04/21/22 11:01	1

Lab Sample ID: LCS 240-523444/5

Matrix: Water

Analysis Batch: 523444

Client Sample ID:	Lab Control Sample
	Pren Type: Total/NA

Prep	Type:	Total/NA
%Rec		

Analyte	Spike Added		LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Acetone	40.0	21.8	Qualifier	ug/L	=	54	50 - 149	
Benzene	20.0	18.3		ug/L		91	77 - 123	
Bromodichloromethane	20.0	15.2		ug/L		76	69 - 126	
Bromoform	20.0	13.2		ug/L		66	57 - 129	
Bromomethane	20.0	16.9		ug/L		84	36 - 142	
2-Butanone (MEK)	40.0	27.3		ug/L		68	54 - 156	
Carbon disulfide	20.0	15.0		ug/L		75	43 - 140	
Carbon tetrachloride	20.0	16.6		ug/L		83	55 - 137	
Chlorobenzene	20.0	19.2		ug/L		96	80 - 121	
Chloroethane	20.0	16.0		ug/L		80	38 - 152	
Chloroform	20.0	17.5		ug/L		88	74 - 122	
Chloromethane	20.0	14.8		ug/L		74	47 - 143	
1,1-Dichloroethane	20.0	15.4		ug/L		77	72 - 127	
1,2-Dichloroethane	20.0	15.6		ug/L		78	66 - 128	
1,1-Dichloroethene	20.0	18.8		ug/L		94	63 - 134	
1,2-Dichloropropane	20.0	16.1		ug/L		81	75 - 133	
cis-1,3-Dichloropropene	20.0	14.9		ug/L		75	64 - 130	
trans-1,3-Dichloropropene	20.0	12.6		ug/L		63	57 ₋ 129	
Ethylbenzene	20.0	18.7		ug/L		94	80 - 121	
2-Hexanone	40.0	23.1		ug/L		58	43 - 167	
Methylene Chloride	20.0	17.2		ug/L		86	71 - 125	
4-Methyl-2-pentanone (MIBK)	40.0	24.2		ug/L		60	46 - 158	
Styrene	20.0	17.9		ug/L		89	80 - 135	
1,1,2,2-Tetrachloroethane	20.0	16.0		ug/L		80	58 - 157	
Tetrachloroethene	20.0	21.1		ug/L		105	76 - 123	
Toluene	20.0	17.9		ug/L		90	80 - 123	
Trichloroethene	20.0	21.1		ug/L		105	70 - 122	
Vinyl chloride	20.0	17.1		ug/L		86	60 - 144	
Xylenes, Total	40.0	38.0		ug/L		95	80 - 121	
1,1,1-Trichloroethane	20.0	16.7		ug/L		84	64 - 131	
1,1,2-Trichloroethane	20.0	17.8		ug/L		89	70 - 138	
1,2-Dibromo-3-Chloropropane	20.0	11.2		ug/L		56	53 - 135	
1,2-Dibromoethane	20.0	17.3		ug/L		86	71 - 134	
Dichlorodifluoromethane	20.0	21.0		ug/L		105	34 - 153	
cis-1,2-Dichloroethene	20.0	19.0		ug/L		95	77 - 123	
trans-1,2-Dichloroethene	20.0	18.2		ug/L		91	75 - 124	
Isopropylbenzene	20.0	19.0		ug/L		95	74 - 128	
Methyl tert-butyl ether	20.0	14.8		ug/L		74	65 - 126	
1,1,2-Trichloro-1,2,2-trifluoroetha	20.0	20.4		ug/L		102	51 - 146	
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Eurofins Canton

QC Sample Results

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Job ID: 240-165203-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-523444/5

Matrix: Water

Analysis Batch: 523444

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

	Spike	LCS	LCS			%Rec	
Analyte	Added	Result	Qualifier	Unit	D %Re	c Limits	
1,2,4-Trichlorobenzene	20.0	17.8		ug/L	8	9 44 - 147	
1,2-Dichlorobenzene	20.0	20.1		ug/L	10	0 78 - 120	
1,3-Dichlorobenzene	20.0	19.2		ug/L	9	6 80 - 120	
1,4-Dichlorobenzene	20.0	19.1		ug/L	9	5 80 - 120	
Trichlorofluoromethane	20.0	18.7		ug/L	9	4 30 - 170	
Dibromochloromethane	20.0	14.8		ug/L	7	4 70 - 124	
m-Xylene & p-Xylene	20.0	19.0		ug/L	9	5 80 - 120	
o-Xylene	20.0	19.0		ug/L	9	5 80 - 123	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	73		62 - 137
4-Bromofluorobenzene (Surr)	86		56 - 136
Toluene-d8 (Surr)	81		78 - 122
Dibromofluoromethane (Surr)	90		73 - 120

QC Association Summary

Client: ZF Active Safety and Electronics LLC

Job ID: 240-165203-1

Project/Site: Milford

GC/MS VOA

Analysis Batch: 523444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-165203-1	OW-16D2_041822	Total/NA	Water	8260B	
240-165203-2	EQUIPMENT BLANK_041822	Total/NA	Water	8260B	
240-165203-3	FIELD BLANK_041822	Total/NA	Water	8260B	
240-165203-4	TRIP BLANK	Total/NA	Water	8260B	
MB 240-523444/8	Method Blank	Total/NA	Water	8260B	
LCS 240-523444/5	Lab Control Sample	Total/NA	Water	8260B	

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Lab Chronicle

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Client Sample ID: OW-16D2 041822 Lab Sample ID: 240-165203-1

Date Collected: 04/18/22 10:55

Matrix: Water

Job ID: 240-165203-1

Matrix: Water

Date Received: 04/19/22 10:00

Batch Dilution Batch Batch **Prepared** Method or Analyzed **Prep Type** Type Run **Factor** Number Analyst Lab Total/NA Analysis 8260B 523444 04/21/22 15:37 LEE TAL CAN

Client Sample ID: EQUIPMENT BLANK 041822 Lab Sample ID: 240-165203-2

Date Collected: 04/18/22 11:20 Date Received: 04/19/22 10:00

Batch Batch Dilution **Batch** Prepared **Prep Type** Type Method Run Factor Number or Analyzed Analyst Lab Total/NA Analysis 8260B 523444 04/21/22 16:02 LEE TAL CAN

Client Sample ID: FIELD BLANK_041822 Lab Sample ID: 240-165203-3

Date Collected: 04/18/22 10:35 **Matrix: Water**

Date Received: 04/19/22 10:00

Batch Batch Dilution Batch **Prepared Prep Type** Method **Factor** Number or Analyzed Type Run Analyst Lab TAL CAN Total/NA Analysis 8260B 523444 04/21/22 16:27 LEE

Client Sample ID: TRIP BLANK Lab Sample ID: 240-165203-4

Date Collected: 04/18/22 00:00 **Matrix: Water**

Date Received: 04/19/22 10:00

Batch **Batch** Dilution Batch **Prepared Prep Type** Method Run Factor Number or Analyzed Analyst Type Lab 8260B 523444 04/21/22 16:52 LEE TAL CAN Total/NA Analysis

Laboratory References:

TAL CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Eurofins Canton

Accreditation/Certification Summary

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Job ID: 240-165203-1

Laboratory: Eurofins Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-27-23
Connecticut	State	PH-0590	12-31-23
Florida	NELAP	E87225	06-30-22
Georgia	State	4062	02-23-22 *
Illinois	NELAP	200004	07-31-22
lowa	State	421	06-01-23
Kansas	NELAP	E-10336	04-30-22
Kentucky (UST)	State	112225	02-23-22 *
Kentucky (WW)	State	KY98016	12-31-22
Minnesota	NELAP	039-999-348	12-31-22
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	11-06-22
New York	NELAP	10975	04-01-23
Ohio	State	8303	02-23-23
Ohio VAP	State	CL0024	02-27-23
Oregon	NELAP	4062	02-27-23
Pennsylvania	NELAP	68-00340	04-24-22
Texas	NELAP	T104704517-22-16	08-31-22
Virginia	NELAP	11570	09-14-22
Washington	State	C971	01-12-23
West Virginia DEP	State	210	12-31-22

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 $^{^{\}star} \ \text{Accreditation/Certification renewal pending - accreditation/certification considered valid}.$

MICHIGAN 190

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4101 Shuffel Drive NW					7		Chain	Of Cu	stod	y/A	Ana	lysis	Rec	ues	st							Labo	ratory ID	No. (Let N	(0.)
North Cauton, OH 44720																									
Attn. Michael DelMonico				Privileged & Co	nfidential		Yes			Site Na	me:	Milfo	rd												
Project Type:	Groundy	vater San	npling · IZ	TRW PO No.	30046730.0001	Z				Site La	cation		Milford	Michig	tan										
TRW PM: (name, company, address, e	-mail)			Database Mana	ger: (name, comp	any, addres	ss, E-mail)				L			Prese	ervativ	es Coo	de (see	below	()						
Bob Bleazard				Marina Samp a	nd Sharon Clouse																				
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1 OW-16D2			OW-16D2_6-1822			GW	WATER	REG	3	G	,				\top	\top	T					+	Lan Sa	mpre Num	7013
2		500													\top										
3 EQUIPMENT BLANK			EQUIPMENT BLANK 04182	2	1120	QC	WATER	REG	(L	G	N S														
4 FIELD BLANK	5000		FIELD BLANK_04/82	2 4	1035	QC	WATER	REG	1	G	N S														
5 TRIP BLANK			TRIP BLANK_			QC	WATER	REG	1	G.	N 3														
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WI-NC-099

VOA Sample Preservation - Date/Time VOAs Frozen:

4/26/2022



Environment Testing America

ANALYTICAL REPORT

Eurofins Canton 180 S. Van Buren Avenue Barberton, OH 44203 Tel: (330)497-9396

Laboratory Job ID: 240-163988-1 Client Project/Site: TRW Milford

For:

ZF Active Safety and Electronics LLC Tech 2 12025 Tech Center Drive Livonia, Michigan 48150

Attn: Scott Detwiler

Ade Del Your

Authorized for release by: 3/30/2022 11:25:37 AM

Michael DelMonico, Project Manager I (330)497-9396

Michael.DelMonico@Eurofinset.com

LINKS

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Total Access

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www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ZF Active Safety and Electronics LLC

Job ID: 240-163988-1 Project/Site: TRW Milford

Qualifiers

GC/MS VOA

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.

Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery **CFL** Contains Free Liquid CFU Colony Forming Unit CNF Contains No Free Liquid

Duplicate Error Ratio (normalized absolute difference) **DER**

Dil Fac **Dilution Factor**

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

Estimated Detection Limit (Dioxin) **EDL** LOD Limit of Detection (DoD/DOE) LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level" MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit MLMinimum Level (Dioxin) MPN Most Probable Number Method Quantitation Limit MQL

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive QC **Quality Control**

Relative Error Ratio (Radiochemistry) **RER**

Reporting Limit or Requested Limit (Radiochemistry) RL

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin) **TEQ** Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

Eurofins Canton

Page 3 of 25 3/30/2022

Case Narrative

Client: ZF Active Safety and Electronics LLC

Project/Site: TRW Milford

Job ID: 240-163988-1

Job ID: 240-163988-1

Laboratory: Eurofins Canton

Narrative

Job Narrative 240-163988-1

Comments

No additional comments.

Receipt

The samples were received on 3/23/2022 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.9° C and 1.0° C.

GC/MS VOA

No additional analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep

No additional analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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Method Summary

Client: ZF Active Safety and Electronics LLC

Project/Site: TRW Milford

Job ID: 240-163988-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
5030B	Purge and Trap	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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Sample Summary

Client: ZF Active Safety and Electronics LLC

Project/Site: TRW Milford

Lab Sample ID Client Sample ID Received Matrix Collected 240-163988-1 OW-16D2_032122 Water 03/21/22 10:30 03/23/22 08:00 240-163988-2 **EQUIPMENT BLANK** Water 03/21/22 10:30 03/23/22 08:00 Water 240-163988-3 FIELD BLANK 03/21/22 10:30 03/23/22 08:00 TRIP BLANK 03/21/22 00:00 03/23/22 08:00 240-163988-4 Water

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Job ID: 240-163988-1

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Detection Summary

Client: ZF Active Safety and Electronics LLC

Client Sample ID: OW-16D2_032122

Project/Site: TRW Milford

Lab Sample ID: 240-163988-1

Job ID: 240-163988-1

Analyte	Result Qualifier	RL	Unit	Dil Fac D	Method	Prep Type
1,1-Dichloroethane	3.7	1.0	ug/L		8260B	Total/NA
Vinyl chloride	2.3	1.0	ug/L	1	8260B	Total/NA
cis-1,2-Dichloroethene	18	1.0	ug/L	1	8260B	Total/NA
trans-1,2-Dichloroethene	1.6	1.0	ug/L	1	8260B	Total/NA

Client Sample ID: EQUIPMENT BLANK	Lab Sample ID: 240-163988-2

No Detections.

Client Sample ID: FIELD BLANK Lab Sample ID: 240-163988-3

No Detections.

Client Sample ID: TRIP BLANK Lab Sample ID: 240-163988-4

No Detections.

This Detection Summary does not include radiochemical test results.

Client: ZF Active Safety and Electronics LLC

Project/Site: TRW Milford

Toluene-d8 (Surr)

Client Sample ID: OW-16D2_032122

Date Collected: 03/21/22 10:30 Date Received: 03/23/22 08:00

Lab Sample ID: 240-163988-1

Matrix: Water

Job ID: 240-163988-1

Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	ug/L			03/28/22 17:24	1
Benzene	1.0	U	1.0	ug/L			03/28/22 17:24	1
Bromodichloromethane	1.0	U	1.0	ug/L			03/28/22 17:24	1
Bromoform	1.0	U	1.0	ug/L			03/28/22 17:24	1
Bromomethane	1.0	U	1.0	ug/L			03/28/22 17:24	1
2-Butanone (MEK)	10	U	10	ug/L			03/28/22 17:24	1
Carbon disulfide	1.0	U	1.0	ug/L			03/28/22 17:24	1
Carbon tetrachloride	1.0	U	1.0	ug/L			03/28/22 17:24	1
Chlorobenzene	1.0	U	1.0	ug/L			03/28/22 17:24	1
Chloroethane	1.0	U	1.0	ug/L			03/28/22 17:24	1
Chloroform	1.0		1.0	ug/L			03/28/22 17:24	1
Chloromethane	1.0		1.0	ug/L			03/28/22 17:24	1
1,1-Dichloroethane	3.7		1.0	ug/L			03/28/22 17:24	
1,2-Dichloroethane	1.0	ш	1.0	ug/L			03/28/22 17:24	1
1,1-Dichloroethene	1.0		1.0	ug/L			03/28/22 17:24	1
1,2-Dichloropropane	1.0		1.0	ug/L			03/28/22 17:24	
cis-1,3-Dichloropropene	1.0		1.0	ug/L			03/28/22 17:24	1
trans-1,3-Dichloropropene	1.0	-	1.0	ug/L			03/28/22 17:24	1
							03/28/22 17:24	
Ethylbenzene 2-Hexanone	1.0 10		1.0	ug/L				1
			10	ug/L			03/28/22 17:24	1
Methylene Chloride	5.0		5.0	ug/L			03/28/22 17:24	1
4-Methyl-2-pentanone (MIBK)	10		10	ug/L			03/28/22 17:24	1
Styrene	1.0		1.0	ug/L			03/28/22 17:24	1
1,1,2,2-Tetrachloroethane	1.0		1.0	ug/L			03/28/22 17:24	
Tetrachloroethene	1.0		1.0	ug/L			03/28/22 17:24	1
Toluene	1.0		1.0	ug/L			03/28/22 17:24	1
Trichloroethene	1.0	U	1.0	ug/L			03/28/22 17:24	1
Vinyl chloride	2.3		1.0	ug/L			03/28/22 17:24	1
Xylenes, Total	2.0		2.0	ug/L			03/28/22 17:24	1
1,1,1-Trichloroethane	1.0		1.0	ug/L			03/28/22 17:24	1
1,1,2-Trichloroethane	1.0		1.0	ug/L			03/28/22 17:24	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	ug/L			03/28/22 17:24	1
1,2-Dibromoethane	1.0	U	1.0	ug/L			03/28/22 17:24	1
Dichlorodifluoromethane	1.0	U	1.0	ug/L			03/28/22 17:24	1
cis-1,2-Dichloroethene	18		1.0	ug/L			03/28/22 17:24	1
trans-1,2-Dichloroethene	1.6		1.0	ug/L			03/28/22 17:24	1
Isopropylbenzene	1.0	U	1.0	ug/L			03/28/22 17:24	1
Methyl tert-butyl ether	1.0	U	1.0	ug/L			03/28/22 17:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	ug/L			03/28/22 17:24	1
1,2,4-Trichlorobenzene	1.0	U	1.0	ug/L			03/28/22 17:24	1
1,2-Dichlorobenzene	1.0	U	1.0	ug/L			03/28/22 17:24	1
1,3-Dichlorobenzene	1.0	U	1.0	ug/L			03/28/22 17:24	1
1,4-Dichlorobenzene	1.0	U	1.0	ug/L			03/28/22 17:24	1
Trichlorofluoromethane	1.0	U	1.0	ug/L			03/28/22 17:24	1
Dibromochloromethane	1.0	U	1.0	ug/L			03/28/22 17:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		62 - 137		-		03/28/22 17:24	1
4-Bromofluorobenzene (Surr)	90		56 - 136				03/28/22 17:24	1
			70 400				00/00/00 17 7 1	

Eurofins Canton

03/28/22 17:24

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3/30/2022

Client: ZF Active Safety and Electronics LLC Job ID: 240-163988-1

Project/Site: TRW Milford

Date Received: 03/23/22 08:00

Client Sample ID: OW-16D2_032122 Lab Sample ID: 240-163988-1

Date Collected: 03/21/22 10:30

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

%Recovery Qualifier Limits Prepared Analyzed Dil Fac Dibromofluoromethane (Surr) 98 73 - 120 03/28/22 17:24

Client: ZF Active Safety and Electronics LLC

Project/Site: TRW Milford

Surrogate

Toluene-d8 (Surr)

1,2-Dichloroethane-d4 (Surr)

4-Bromofluorobenzene (Surr)

Client Sample ID: EQUIPMENT BLANK

Date Collected: 03/21/22 10:30 Date Received: 03/23/22 08:00 Lab Sample ID: 240-163988-2

Matrix: Water

Job ID: 240-163988-1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Acetone	10	U	10	ug/L			03/28/22 15:44	
Benzene	1.0	U	1.0	ug/L			03/28/22 15:44	
Bromodichloromethane	1.0	U	1.0	ug/L			03/28/22 15:44	
Bromoform	1.0	U	1.0	ug/L			03/28/22 15:44	
Bromomethane	1.0	U	1.0	ug/L			03/28/22 15:44	
2-Butanone (MEK)	10	U	10	ug/L			03/28/22 15:44	
Carbon disulfide	1.0	U	1.0	ug/L			03/28/22 15:44	
Carbon tetrachloride	1.0	U	1.0	ug/L			03/28/22 15:44	
Chlorobenzene	1.0	U	1.0	ug/L			03/28/22 15:44	
Chloroethane	1.0	U	1.0	ug/L			03/28/22 15:44	
Chloroform	1.0	U	1.0	ug/L			03/28/22 15:44	
Chloromethane	1.0	U	1.0	ug/L			03/28/22 15:44	
1,1-Dichloroethane	1.0	U	1.0	ug/L			03/28/22 15:44	
1,2-Dichloroethane	1.0	U	1.0	ug/L			03/28/22 15:44	
1,1-Dichloroethene	1.0	U	1.0	ug/L			03/28/22 15:44	
1,2-Dichloropropane	1.0	U	1.0	ug/L			03/28/22 15:44	
cis-1,3-Dichloropropene	1.0	U	1.0	ug/L			03/28/22 15:44	
trans-1,3-Dichloropropene	1.0	U	1.0	ug/L			03/28/22 15:44	
Ethylbenzene	1.0	U	1.0	ug/L			03/28/22 15:44	
2-Hexanone	10	U	10	ug/L			03/28/22 15:44	
Methylene Chloride	5.0	U	5.0	ug/L			03/28/22 15:44	
4-Methyl-2-pentanone (MIBK)	10	U	10	ug/L			03/28/22 15:44	
Styrene	1.0	U	1.0	ug/L			03/28/22 15:44	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	ug/L			03/28/22 15:44	
Tetrachloroethene	1.0	U	1.0	ug/L			03/28/22 15:44	
Toluene	1.0	U	1.0	ug/L			03/28/22 15:44	
Trichloroethene	1.0	U	1.0	ug/L			03/28/22 15:44	
Vinyl chloride	1.0	U	1.0	ug/L			03/28/22 15:44	
Xylenes, Total	2.0	U	2.0	ug/L			03/28/22 15:44	
1,1,1-Trichloroethane	1.0	U	1.0	ug/L			03/28/22 15:44	
1,1,2-Trichloroethane	1.0	U	1.0	ug/L			03/28/22 15:44	
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	ug/L			03/28/22 15:44	
1,2-Dibromoethane	1.0	U	1.0	ug/L			03/28/22 15:44	
Dichlorodifluoromethane	1.0	U	1.0	ug/L			03/28/22 15:44	
cis-1,2-Dichloroethene	1.0	U	1.0	ug/L			03/28/22 15:44	
trans-1,2-Dichloroethene	1.0	U	1.0	ug/L			03/28/22 15:44	
Isopropylbenzene	1.0		1.0	ug/L			03/28/22 15:44	
Methyl tert-butyl ether	1.0		1.0	ug/L			03/28/22 15:44	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0		1.0	ug/L			03/28/22 15:44	
1,2,4-Trichlorobenzene	1.0		1.0	ug/L			03/28/22 15:44	
1,2-Dichlorobenzene	1.0		1.0	ug/L			03/28/22 15:44	
1,3-Dichlorobenzene	1.0		1.0	ug/L			03/28/22 15:44	
1,4-Dichlorobenzene	1.0		1.0	ug/L			03/28/22 15:44	
Trichlorofluoromethane	1.0		1.0	ug/L			03/28/22 15:44	
Dibromochloromethane	1.0		1.0	ug/L			03/28/22 15:44	

Eurofins Canton

3/30/2022

Analyzed

03/28/22 15:44

03/28/22 15:44

03/28/22 15:44

Prepared

Dil Fac

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Limits

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%Recovery Qualifier

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92

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Client: ZF Active Safety and Electronics LLC Job ID: 240-163988-1

Project/Site: TRW Milford

Client Sample ID: EQUIPMENT BLANK Lab Sample ID: 240-163988-2

Date Collected: 03/21/22 10:30

Matrix: Water

Date Received: 03/23/22 08:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

%Recovery Qualifier Limits Prepared Analyzed Dil Fac Dibromofluoromethane (Surr) 94 73 - 120 03/28/22 15:44

Client: ZF Active Safety and Electronics LLC

Project/Site: TRW Milford

Toluene-d8 (Surr)

Client Sample ID: FIELD BLANK

Date Collected: 03/21/22 10:30 Date Received: 03/23/22 08:00

Lab Sample ID: 240-163988-3

Matrix: Water

Job ID: 240-163988-1

Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	ug/L			03/28/22 16:08	1
Benzene	1.0	U	1.0	ug/L			03/28/22 16:08	1
Bromodichloromethane	1.0	U	1.0	ug/L			03/28/22 16:08	1
Bromoform	1.0	U	1.0	ug/L			03/28/22 16:08	1
Bromomethane	1.0	U	1.0	ug/L			03/28/22 16:08	1
2-Butanone (MEK)	10	U	10	ug/L			03/28/22 16:08	1
Carbon disulfide	1.0	U	1.0	ug/L			03/28/22 16:08	1
Carbon tetrachloride	1.0	U	1.0	ug/L			03/28/22 16:08	1
Chlorobenzene	1.0	U	1.0	ug/L			03/28/22 16:08	1
Chloroethane	1.0	U	1.0	ug/L			03/28/22 16:08	1
Chloroform	1.0	U	1.0	ug/L			03/28/22 16:08	1
Chloromethane	1.0	U	1.0	ug/L			03/28/22 16:08	1
1,1-Dichloroethane	1.0	U	1.0	ug/L			03/28/22 16:08	1
1,2-Dichloroethane	1.0	U	1.0	ug/L			03/28/22 16:08	1
1,1-Dichloroethene	1.0	U	1.0	ug/L			03/28/22 16:08	1
1,2-Dichloropropane	1.0	U	1.0	ug/L			03/28/22 16:08	1
cis-1,3-Dichloropropene	1.0	U	1.0	ug/L			03/28/22 16:08	1
trans-1,3-Dichloropropene	1.0	U	1.0	ug/L			03/28/22 16:08	1
Ethylbenzene	1.0		1.0	ug/L			03/28/22 16:08	<u>.</u> 1
2-Hexanone	10	U	10	ug/L			03/28/22 16:08	1
Methylene Chloride	5.0		5.0	ug/L			03/28/22 16:08	1
4-Methyl-2-pentanone (MIBK)	10		10	ug/L			03/28/22 16:08	· 1
Styrene	1.0		1.0	ug/L			03/28/22 16:08	1
1,1,2,2-Tetrachloroethane	1.0		1.0	ug/L			03/28/22 16:08	1
Tetrachloroethene	1.0		1.0	ug/L			03/28/22 16:08	1
Toluene	1.0		1.0	ug/L			03/28/22 16:08	1
Trichloroethene	1.0		1.0	ug/L			03/28/22 16:08	1
Vinyl chloride	1.0		1.0	ug/L			03/28/22 16:08	1
Xylenes, Total	2.0		2.0	ug/L			03/28/22 16:08	1
1,1,1-Trichloroethane	1.0		1.0	ug/L			03/28/22 16:08	1
1,1,2-Trichloroethane	1.0		1.0	ug/L			03/28/22 16:08	 1
1,2-Dibromo-3-Chloropropane	2.0		2.0	ug/L			03/28/22 16:08	1
1,2-Dibromoethane	1.0		1.0	ug/L			03/28/22 16:08	1
Dichlorodifluoromethane	1.0		1.0	ug/L			03/28/22 16:08	
cis-1,2-Dichloroethene	1.0		1.0	ug/L			03/28/22 16:08	1
trans-1,2-Dichloroethene	1.0		1.0	ug/L			03/28/22 16:08	1
Isopropylbenzene	1.0		1.0	ug/L			03/28/22 16:08	
Methyl tert-butyl ether	1.0		1.0	ug/L			03/28/22 16:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0		1.0	ug/L ug/L			03/28/22 16:08	1
1,2,4-Trichlorobenzene	1.0		1.0				03/28/22 16:08	' 1
* *				ug/L				
1,2-Dichlorobenzene 1,3-Dichlorobenzene	1.0 1.0		1.0 1.0	ug/L			03/28/22 16:08 03/28/22 16:08	1
1,4-Dichlorobenzene				ug/L				۱
,	1.0		1.0	ug/L			03/28/22 16:08	1
Trichlorofluoromethane	1.0		1.0	ug/L			03/28/22 16:08	1
Dibromochloromethane	1.0	U	1.0	ug/L			03/28/22 16:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		62 - 137		-	<u> </u>	03/28/22 16:08	1
4-Bromofluorobenzene (Surr)	91		56 - 136				03/28/22 16:08	1

Eurofins Canton

03/28/22 16:08

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78 - 122

92

3/30/2022

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Client: ZF Active Safety and Electronics LLC Job ID: 240-163988-1

Project/Site: TRW Milford

Client Sample ID: FIELD BLANK Lab Sample ID: 240-163988-3

Date Collected: 03/21/22 10:30 East Sample 15: 240 100000 C

Date Received: 03/23/22 08:00 Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

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Client: ZF Active Safety and Electronics LLC

Project/Site: TRW Milford

1,2-Dichloroethane-d4 (Surr)

4-Bromofluorobenzene (Surr)

Toluene-d8 (Surr)

Date Received: 03/23/22 08:00

Lab Sample ID: 240-163988-4

Client Sample ID: TRIP BLANK Date Collected: 03/21/22 00:00 **Matrix: Water**

Job ID: 240-163988-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	ug/L			03/28/22 16:33	1
Benzene	1.0	U	1.0	ug/L			03/28/22 16:33	1
Bromodichloromethane	1.0	U	1.0	ug/L			03/28/22 16:33	1
Bromoform	1.0	U	1.0	ug/L			03/28/22 16:33	1
Bromomethane	1.0	U	1.0	ug/L			03/28/22 16:33	1
2-Butanone (MEK)	10	U	10	ug/L			03/28/22 16:33	1
Carbon disulfide	1.0	U	1.0	ug/L			03/28/22 16:33	1
Carbon tetrachloride	1.0	U	1.0	ug/L			03/28/22 16:33	1
Chlorobenzene	1.0	U	1.0	ug/L			03/28/22 16:33	1
Chloroethane	1.0	U	1.0	ug/L			03/28/22 16:33	1
Chloroform	1.0	U	1.0	ug/L			03/28/22 16:33	1
Chloromethane	1.0	U	1.0	ug/L			03/28/22 16:33	1
1,1-Dichloroethane	1.0	U	1.0	ug/L			03/28/22 16:33	1
1,2-Dichloroethane	1.0		1.0	ug/L			03/28/22 16:33	1
1,1-Dichloroethene	1.0		1.0	ug/L			03/28/22 16:33	1
1,2-Dichloropropane	1.0	U	1.0	ug/L			03/28/22 16:33	1
cis-1,3-Dichloropropene	1.0		1.0	ug/L			03/28/22 16:33	1
trans-1,3-Dichloropropene	1.0		1.0	ug/L			03/28/22 16:33	1
Ethylbenzene	1.0	Ü	1.0	ug/L			03/28/22 16:33	
2-Hexanone	10		10	ug/L			03/28/22 16:33	1
Methylene Chloride	5.0		5.0	ug/L			03/28/22 16:33	1
4-Methyl-2-pentanone (MIBK)	10		10	ug/L			03/28/22 16:33	· · · · · · 1
Styrene	1.0		1.0	ug/L			03/28/22 16:33	1
1,1,2,2-Tetrachloroethane	1.0		1.0	ug/L			03/28/22 16:33	1
Tetrachloroethene	1.0		1.0	ug/L			03/28/22 16:33	· · · · · · · · · · · · · · · · · · ·
Toluene	1.0		1.0	ug/L			03/28/22 16:33	1
Trichloroethene	1.0		1.0	ug/L			03/28/22 16:33	1
Vinyl chloride	1.0		1.0	ug/L			03/28/22 16:33	
Xylenes, Total	2.0		2.0	ug/L			03/28/22 16:33	1
1,1,1-Trichloroethane	1.0		1.0	ug/L			03/28/22 16:33	1
1,1,2-Trichloroethane	1.0		1.0	ug/L			03/28/22 16:33	
1,2-Dibromo-3-Chloropropane	2.0		2.0	-			03/28/22 16:33	1
1.2-Dibromoethane	1.0		1.0	ug/L			03/28/22 16:33	1
Dichlorodifluoromethane	1.0		1.0	ug/L			03/28/22 16:33	
cis-1,2-Dichloroethene	1.0		1.0	ug/L			03/28/22 16:33	1
·				ug/L				
trans-1,2-Dichloroethene	1.0		1.0	ug/L			03/28/22 16:33 03/28/22 16:33	1
Isopropylbenzene	1.0		1.0	ug/L				1
Methyl tert-butyl ether	1.0		1.0	ug/L			03/28/22 16:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0		1.0	ug/L			03/28/22 16:33	1
1,2,4-Trichlorobenzene	1.0		1.0	ug/L			03/28/22 16:33	1
1,2-Dichlorobenzene	1.0		1.0	ug/L			03/28/22 16:33	1
1,3-Dichlorobenzene	1.0		1.0	ug/L			03/28/22 16:33	
1,4-Dichlorobenzene	1.0		1.0	ug/L			03/28/22 16:33	1
Trichlorofluoromethane	1.0		1.0	ug/L			03/28/22 16:33	1
Dibromochloromethane	1.0	U	1.0	ug/L			03/28/22 16:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
	·				-		00/00/00 10:00	

03/28/22 16:33

03/28/22 16:33

03/28/22 16:33

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62 - 137

56 - 136

78 - 122

101

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Eurofins Canton

Client: ZF Active Safety and Electronics LLC Job ID: 240-163988-1

Project/Site: TRW Milford

Date Received: 03/23/22 08:00

Client Sample ID: TRIP BLANK Lab Sample ID: 240-163988-4

Date Collected: 03/21/22 00:00 **Matrix: Water**

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

%Recovery Qualifier Limits Prepared Analyzed Dil Fac Dibromofluoromethane (Surr) 98 73 - 120 03/28/22 16:33

Surrogate Summary

Client: ZF Active Safety and Electronics LLC

Project/Site: TRW Milford

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water Prep Type: Total/NA

		Percent Surrogate Recovery						
		DCA	BFB	TOL	DBFM			
Lab Sample ID	Client Sample ID	(62-137)	(56-136)	(78-122)	(73-120)			
240-163988-1	OW-16D2_032122	98	90	92	98			
240-163988-2	EQUIPMENT BLANK	98	90	92	94			
240-163988-3	FIELD BLANK	99	91	92	97			
240-163988-4	TRIP BLANK	101	89	92	98			
LCS 240-521043/4	Lab Control Sample	92	100	96	95			
MB 240-521043/7	Method Blank	103	92	93	99			

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

DBFM = Dibromofluoromethane (Surr)

Eurofins Canton

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QC Sample Results

Client: ZF Active Safety and Electronics LLC

Project/Site: TRW Milford

Job ID: 240-163988-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-521043/7

Matrix: Water

1,2-Dichloroethane-d4 (Surr)

Client Sample ID: Method Blank **Prep Type: Total/NA**

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	ug/L			03/28/22 15:18	1
Benzene	1.0	U	1.0	ug/L			03/28/22 15:18	1
Bromodichloromethane	1.0	U	1.0	ug/L			03/28/22 15:18	1
Bromoform	1.0	U	1.0	ug/L			03/28/22 15:18	1
Bromomethane	1.0	U	1.0	ug/L			03/28/22 15:18	1
2-Butanone (MEK)	10	U	10	ug/L			03/28/22 15:18	1
Carbon disulfide	1.0	U	1.0	ug/L			03/28/22 15:18	1
Carbon tetrachloride	1.0	U	1.0	ug/L			03/28/22 15:18	1
Chlorobenzene	1.0	U	1.0	ug/L			03/28/22 15:18	1
Chloroethane	1.0	U	1.0	ug/L			03/28/22 15:18	1
Chloroform	1.0	U	1.0	ug/L			03/28/22 15:18	1
Chloromethane	1.0	U	1.0	ug/L			03/28/22 15:18	1
1,1-Dichloroethane	1.0	U	1.0	ug/L			03/28/22 15:18	1
1,2-Dichloroethane	1.0	U	1.0	ug/L			03/28/22 15:18	1
1,1-Dichloroethene	1.0	U	1.0	ug/L			03/28/22 15:18	1
1,2-Dichloropropane	1.0	U	1.0	ug/L			03/28/22 15:18	1
cis-1,3-Dichloropropene	1.0	U	1.0	ug/L			03/28/22 15:18	1
trans-1,3-Dichloropropene	1.0	U	1.0	ug/L			03/28/22 15:18	1
Ethylbenzene	1.0	U	1.0	ug/L			03/28/22 15:18	1
2-Hexanone	10	U	10	ug/L			03/28/22 15:18	1
Methylene Chloride	5.0	U	5.0	ug/L			03/28/22 15:18	1
4-Methyl-2-pentanone (MIBK)	10	U	10	ug/L			03/28/22 15:18	1
Styrene	1.0	U	1.0	ug/L			03/28/22 15:18	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	ug/L			03/28/22 15:18	1
Tetrachloroethene	1.0	U	1.0	ug/L			03/28/22 15:18	1
Toluene	1.0	U	1.0	ug/L			03/28/22 15:18	1
Trichloroethene	1.0	U	1.0	ug/L			03/28/22 15:18	1
Vinyl chloride	1.0	U	1.0	ug/L			03/28/22 15:18	1
Xylenes, Total	2.0	U	2.0	ug/L			03/28/22 15:18	1
1,1,1-Trichloroethane	1.0	U	1.0	ug/L			03/28/22 15:18	1
1,1,2-Trichloroethane	1.0	U	1.0	ug/L			03/28/22 15:18	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	ug/L			03/28/22 15:18	1
1,2-Dibromoethane	1.0	U	1.0	ug/L			03/28/22 15:18	1
Dichlorodifluoromethane	1.0	U	1.0	ug/L			03/28/22 15:18	1
cis-1,2-Dichloroethene	1.0	U	1.0	ug/L			03/28/22 15:18	1
trans-1,2-Dichloroethene	1.0	U	1.0	ug/L			03/28/22 15:18	1
Isopropylbenzene	1.0	U	1.0	ug/L			03/28/22 15:18	1
Methyl tert-butyl ether	1.0	U	1.0	ug/L			03/28/22 15:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	ug/L			03/28/22 15:18	1
1,2,4-Trichlorobenzene	1.0	U	1.0	ug/L			03/28/22 15:18	1
1,2-Dichlorobenzene	1.0	U	1.0	ug/L			03/28/22 15:18	1
1,3-Dichlorobenzene	1.0	U	1.0	ug/L			03/28/22 15:18	1
1,4-Dichlorobenzene	1.0	U	1.0	ug/L			03/28/22 15:18	1
Trichlorofluoromethane	1.0	U	1.0	ug/L			03/28/22 15:18	1
Dibromochloromethane	1.0	U	1.0	ug/L			03/28/22 15:18	1
		МВ						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1 2 Diablaraathana d1 (Curr)	102		60 107				02/20/22 45:40	4

Eurofins Canton

03/28/22 15:18

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QC Sample Results

Client: ZF Active Safety and Electronics LLC

Project/Site: TRW Milford

Job ID: 240-163988-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-521043/7

Matrix: Water

Analysis Batch: 521043

Client Sample ID: Method Blank

Prep Type: Total/NA

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepa	ared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	92		56 - 136			03/28/22 15:18	1	
Toluene-d8 (Surr)	93		78 - 122			03/28/22 15:18	1	
Dibromofluoromethane (Surr)	99		73 - 120			03/28/22 15:18	1	

Lab Sample ID: LCS 240-521043/4

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Matrix: Water Analysis Batch: 521043 LCS LCS %Rec. Spike

	Spike	LCS LCS			%Rec.	
Analyte	Added	Result Qualifi	er Unit	D %Rec	Limits	
Acetone	50.0	52.1	ug/L	104	50 - 149	
Benzene	25.0	25.3	ug/L	101	77 - 123	
Bromodichloromethane	25.0	26.7	ug/L	107	69 - 126	
Bromoform	25.0	23.9	ug/L	96	57 - 129	
Bromomethane	25.0	24.8	ug/L	99	36 - 142	
2-Butanone (MEK)	50.0	50.0	ug/L	100	54 - 156	
Carbon disulfide	25.0	27.6	ug/L	111	43 - 140	
Carbon tetrachloride	25.0	29.7	ug/L	119	55 - 137	
Chlorobenzene	25.0	25.1	ug/L	100	80 - 121	
Chloroethane	25.0	24.6	ug/L	98	38 - 152	
Chloroform	25.0	25.7	ug/L	103	74 - 122	
Chloromethane	25.0	25.8	ug/L	103	47 - 143	
1,1-Dichloroethane	25.0	25.3	ug/L	101	72 - 127	
1,2-Dichloroethane	25.0	25.5	ug/L	102	66 - 128	
1,1-Dichloroethene	25.0	27.4	ug/L	110	63 - 134	
1,2-Dichloropropane	25.0	25.4	ug/L	102	75 - 133	
cis-1,3-Dichloropropene	25.0	25.8	ug/L	103	64 - 130	
trans-1,3-Dichloropropene	25.0	26.9	ug/L	108	57 - 129	
Ethylbenzene	25.0	27.1	ug/L	108	80 - 121	
2-Hexanone	50.0	57.4	ug/L	115	43 - 167	
Methylene Chloride	25.0	26.6	ug/L	106	71 - 125	
4-Methyl-2-pentanone (MIBK)	50.0	53.5	ug/L	107	46 - 158	
Styrene	25.0	27.4	ug/L	109	80 - 135	
1,1,2,2-Tetrachloroethane	25.0	27.2	ug/L	109	58 - 157	
Tetrachloroethene	25.0	25.6	ug/L	102	76 - 123	
Toluene	25.0	25.3	ug/L	101	80 - 123	
Trichloroethene	25.0	24.7	ug/L	99	70 - 122	
Vinyl chloride	25.0	26.6	ug/L	106	60 - 144	
Xylenes, Total	50.0	55.3	ug/L	111	80 - 121	
1,1,1-Trichloroethane	25.0	27.3	ug/L	109	64 - 131	
1,1,2-Trichloroethane	25.0	25.4	ug/L	101	70 - 138	
1,2-Dibromo-3-Chloropropane	25.0	22.1	ug/L	88	53 - 135	
1,2-Dibromoethane	25.0	25.5	ug/L	102	71 - 134	
Dichlorodifluoromethane	25.0	24.3	ug/L	97	34 - 153	
cis-1,2-Dichloroethene	25.0	25.9	ug/L	104	77 - 123	
trans-1,2-Dichloroethene	25.0	26.1	ug/L	104	75 - 124	
Isopropylbenzene	25.0	27.9	ug/L	112	74 - 128	
Methyl tert-butyl ether	25.0	25.8	ug/L	103	65 - 126	
1,1,2-Trichloro-1,2,2-trifluoroetha	25.0	28.7	ug/L	115	51 - 146	
ne						

Eurofins Canton

QC Sample Results

Client: ZF Active Safety and Electronics LLC

Project/Site: TRW Milford

Job ID: 240-163988-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

LCS LCS

%Recovery Qualifier

92

100

96

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Lab Sample ID: LCS 240-521043/4

Matrix: Water

Surrogate

Toluene-d8 (Surr)

1,2-Dichloroethane-d4 (Surr)

4-Bromofluorobenzene (Surr)

Dibromofluoromethane (Surr)

Analysis Batch: 521043

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,2,4-Trichlorobenzene	25.0	25.9		ug/L		103	44 - 147	
1,2-Dichlorobenzene	25.0	25.6		ug/L		103	78 - 120	
1,3-Dichlorobenzene	25.0	25.7		ug/L		103	80 - 120	
1,4-Dichlorobenzene	25.0	25.1		ug/L		100	80 - 120	
Trichlorofluoromethane	25.0	29.6		ug/L		118	30 - 170	
Dibromochloromethane	25.0	27.4		ug/L		109	70 - 124	
m-Xylene & p-Xylene	25.0	27.2		ug/L		109	80 - 120	
o-Xylene	25.0	28.1		ug/L		112	80 - 123	

Limits 62 - 137

56 - 136

78 - 122

73 - 120

QC Association Summary

Client: ZF Active Safety and Electronics LLC Job ID: 240-163988-1

Project/Site: TRW Milford

GC/MS VOA

Analysis Batch: 521043

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-163988-1	OW-16D2_032122	Total/NA	Water	8260B	
240-163988-2	EQUIPMENT BLANK	Total/NA	Water	8260B	
240-163988-3	FIELD BLANK	Total/NA	Water	8260B	
240-163988-4	TRIP BLANK	Total/NA	Water	8260B	
MB 240-521043/7	Method Blank	Total/NA	Water	8260B	
LCS 240-521043/4	Lab Control Sample	Total/NA	Water	8260B	

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Lab Chronicle

Client: ZF Active Safety and Electronics LLC

Project/Site: TRW Milford

Client Sample ID: OW-16D2 032122 Lab Sample ID: 240-163988-1

Date Collected: 03/21/22 10:30 Date Received: 03/23/22 08:00

Matrix: Water

Job ID: 240-163988-1

Lab

Batch Dilution Batch Batch **Prepared** Method or Analyzed **Prep Type** Type Run **Factor** Number Analyst

Total/NA Analysis 8260B 521043 03/28/22 17:24 SAM TAL CAN

Client Sample ID: EQUIPMENT BLANK Lab Sample ID: 240-163988-2 Date Collected: 03/21/22 10:30 **Matrix: Water**

Date Received: 03/23/22 08:00

Batch Batch Dilution **Batch** Prepared **Prep Type** Type Method Run **Factor** Number or Analyzed Analyst Lab Total/NA Analysis 8260B 521043 03/28/22 15:44 SAM TAL CAN

Client Sample ID: FIELD BLANK

Lab Sample ID: 240-163988-3 Date Collected: 03/21/22 10:30 **Matrix: Water**

Date Received: 03/23/22 08:00

Batch Batch Dilution Batch **Prepared Prep Type** Method **Factor** Number or Analyzed Type Run Analyst Lab TAL CAN Total/NA Analysis 8260B 521043 03/28/22 16:08 SAM

Client Sample ID: TRIP BLANK Lab Sample ID: 240-163988-4

Date Collected: 03/21/22 00:00 **Matrix: Water**

Date Received: 03/23/22 08:00

Batch **Batch** Dilution Batch **Prepared Prep Type** Method Run Factor Number or Analyzed Analyst Type Lab 8260B 521043 03/28/22 16:33 SAM TAL CAN Total/NA Analysis

Laboratory References:

TAL CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Eurofins Canton

Accreditation/Certification Summary

Client: ZF Active Safety and Electronics LLC

Project/Site: TRW Milford

Job ID: 240-163988-1

Laboratory: Eurofins Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-23-22 *
Connecticut	State	PH-0590	12-31-21 *
Florida	NELAP	E87225	06-30-22
Georgia	State	4062	02-23-22 *
Illinois	NELAP	200004	07-31-22
lowa	State	421	06-01-23
Kansas	NELAP	E-10336	04-30-22
Kentucky (UST)	State	112225	02-23-22 *
Kentucky (WW)	State	KY98016	12-31-22
Minnesota	NELAP	039-999-348	12-31-22
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	11-06-22
New York	NELAP	10975	03-31-22
Ohio	State	8303	02-23-23
Ohio VAP	State	CL0024	02-27-23
Oregon	NELAP	4062	02-27-23
Pennsylvania	NELAP	68-00340	08-31-22
Texas	NELAP	T104704517-21-14	08-31-22
Virginia	NELAP	11570	09-14-22
Washington	State	C971	01-12-23
West Virginia DEP	State	210	12-31-22

 $^{^{\}star} \ \text{Accreditation/Certification renewal pending - accreditation/certification considered valid}.$

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	MI(CHI	IGAN														
STL North Canton		17	V.														LAB USE ONLY
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101 Shuffel Drive NW								0.04	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,			4				
orth Canton, OH 44720				Privileged & Cor	fidential		Yes			Site Nan	ne:	Milford					
ttn: Michael DelMonico	Groundw	ater Sami	pling - IZ		30046730.00012	:				Site Loc	ation:	Milfor	d. Michigan				
7		ater Oam	printy - na		er: (name, compa		. E-mail)						Preservat	ives Code (see bel	ow)		
RW PM: (name, company, address, e-r	nam)				d Sharon Clouse						1						
202 East Germann Road				28550 Cabot Drive,													
lesa, AZ 85212				Novi, MI 48377													
ob bleazard@trw.com				Marina.Samp@	arcadis.com												
ob bleazardi@tw.com				sclouse@arcad										1 1 1			
nalysis Level	Level 1 (R	outine Rep	port)	Sampler	AILVS	nt	CITTZ			별							
AT	10 Busines	ss Days (St	tandard - Level 1)	Deliverable	EDD/PDF (e-ma					bos		1 1		1 1 1			
		Sa	mple Identification ar	d Informa	tion					Grab or Comp	09						
Location II)	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	No. of Cont.	Grab	VOC 8260			/2			Lab Sample Numbers
1 OW-16D2 '			OW-16D2_032122	3/21/22	10.30	GW	WATER	REG	3	G 1	1 1			40-16		_	
2 EQUIPMENT BLANK			EQUIPMENT BLANK 032122	1	10.35	GW	WATER	REG	17	G I	X V		$\sqcup \sqcup$	63988		1	
FIELD BLANK			FIELD BLANK_ 032172		10.03	QC	WATER	REG	H ₁	G	N X		$\sqcup \sqcup$	0		-	
4 TRIP BLANK			TRIP BLANK_052122	K		QC	WATER	REG	1	G	N X			Chain of		1	
5	lle.					QC	WATER	REG	1	G	N X			90			
6											\perp			_ ust		\perp	
7														_ &			
8																	
9																	
10																	
11														1			
Special Instructions:																	
Relinquished by:			Company	T		Received I	ny:			Compa	ny			Condition		Custody 5	Seals Intact
adaity			Aricidis			1	Ils A	2			ETA	1122	ļ	Cooler Temp			
			Date/Time 21/21 1190	<u> </u>		Received	NJ /				ime3/8	-	-	Condition	-	Custody S	Seals Intact
telinquished by:	1		Company EETA	1145		-	daa			Date	ime/			Cooler Temp			
Relinquished by:			Date/Time 3/01/02	1175	-	Received	TOYUG			_	EII 2	T NC		Condition		Custody	Seals Intact
cold strange 1	90		Date Time 3/22/22 11:19			Vo	my le	201			29-2			Cooler Temp			
Relinquished by:			Company			Received	by:	<u> </u>		Compa	мту			Condition		Custody	Seals Intact
			Date/Time			1				Date/T	ime			Cooler Temp).		
Preservatives Code: 0 = None; 1 = HC	1.1.10	01. 1 - 11	2504: 4 = NaOH: 5 = 7n Acetate:	6 = McOH: 7 = N	aHSO4: 8 = Othe	r (specify):											









Eurofins TestAmerica Canton Sample Receipt Form/Narrative	Login # : 163989
Canton Facility	
Client Site Name	Cooler unpacked by:
Cooler Received on $3-23-22$ Opened on $3-23-22$	Jamy dayge
FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier	Other
Receipt After-hours: Drop-off Date/Time Storage Location	
TestAmerica Cooler # Foam Box Client Cooler Box Other	
Packing material used: Bubble Wrap Foam Plastic Bag None Other	
COOLANT: Wet Ice Blue Ice Dry Ice Water None	
1. Cooler temperature upon receipt See Multiple Cooler Foi	rm
IR GUN# IR-14 (CF -0.2 °C) Observed Cooler Temp. °C Corrected Cooler T	remp°C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity lead Yes	No Tests that are not
-Were the seals on the outside of the cooler(s) signed & dated?	No NA shacked for pH by
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes	Receiving:
	No NA
	No VOAs Oil and Grease
	NO
5. Were the custody papers relinquished & signed in the appropriate place?	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	No
	No
) No
9. For each sample, does the COC specify preservatives (YN), # of containers (YN), and sa 10. Were correct bottle(s) used for the test(s) indicated?	
	No
If yes, Questions 13-17 have been checked at the originating laboratory.	No
	No (NA) pH Strip Lot# HC157842
13. Were all preserved sample(s) at the correct pH upon receipt? Yes 14. Were VOAs on the COC? Yes	
	NO NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # 6109	
17. Was a LL Hg or Me Hg trip blank present? Yes	No
Contacted PM by via Verbal Ve	oice Mail Other
Concerning	
18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES additional next page	Samples processed by:
19. SAMPLE CONDITION	
Sample(s) were received after the recommended holding	ng time had expired.
Sample(s) were received	
Sample(s) were received with bubble >6 mm in	
20. SAMPLE PRESERVATION	
Complete)	
Sample(s) were furt Time preserved: Preservative(s) added/Lot number(s):	her preserved in the laboratory.
rieservative(s) added/Lot number(s):	
VOA Sample Preservation - Date/Time VOAs Frozen:	

W1-NC-099

ogin	#			

Cooler Description	IR Gun #	Observed	Corrected	Coolant
(Circle)	(Circle)	Temp °C	Temp °C	(Circle)
TA Client Box Other	IR-14 IR-15	1.2	1.0	Wet ice Blue ice Dry
TA Client Box Other	IR-14 IR-15	1.	0.9	Wet ice Blue ice Dry
JA Client Box Other	IR-14 IR-15			Watte Blue Ice Dry I Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry I Water None
TA Client Box Other	IR-14 IR-15			Wet ice Blue ice Dry i Water None
TA Client Sox Other	IR-14 IR-15			Wet ice Blue ice Dry i Water None
TA Client Sox Other	IR-14 IR-15			Wellice Blue Ice Dry I Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry I Water Mone
TA Client Box Other	IR-14 IR-15			Wet ice Blue ice Dry i Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry i Water None
TA Client Box Other	IR-14 IR-15			Wet ice Blue ice Dry i Water None
TA Client Box Other	IR-14 IR-15			Wet ice Blue ice Dry i Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry I Water None
TA Client Box Other	IR-14 IR-15			Wet ice Blue ice Dry i Water None
TA Client Box Other	IR-14 IR-15			Wet ice Blue ice Dry I Water None
TA Client Box Other	IR-14 IR-15			Wellice Blue Ice Dry I Water None
TA Client Box Other	IR-14 IR-15			Wet ice Blue ice Dry i Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry I Water None
TA Client Box Other	IR-14 IR-15			Wet ice Blue ice Dry i Water None
TA Client Box Other	IR-14 IR-15			Wet ice Blue ice Dry i Water None
TA Client Box Other	IR-14 IR-15			Wet ice Blue ice Dry i Water None
TA Client Box Other	IR-14 IR-15			Wet ice Blue ice Dry i Water None
TA Client Box Other	IR-14 IR-15			Wet ice Sive ice Dry i Water None
TA Client Box Other	IR-14 IR-15			Wet ice Blue ice Dry i Water None
TA Client Box Other	IR-14 IR-15			Wet ice Blue ice Dry i Water None
TA Client Box Other	IR-14 IR-15			Wet ice Blue ice Dry i Water None
TA Client Box Other	IR-14 IR-15			Wet ice Sive ice Dry i Water None
TA Client Box Other	IR-14 IR-15			Wet ice Blue ice Dry i Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry I Water None
TA Client Box Other	IR-14 IR-15			Wet ice Blue ice Dry is Water None
TA Client Box Other	IR-14 IR-15			Wef ice Blue ice Dry k Water None
TA Client Box Other	IR-14 IR-15			Wet ice Blue ice Dry is Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry k Water None
TA Client Box Other	IR-14 IR-15			Wet ice Blue ice Dry k Water None

W1-NC-099 Cooler Receipt Form Page 2 - Multiple Coolers



Wednesday, April 06, 2022

Fibertec Project Number:

A07755

Project Identification:

TRW Milford ZF Active Safety (30046730) /30046730

Submittal Date:

04/04/2022

Mrs. Marina Samp Arcadis U.S., Inc. - Novi 28550 Cabot Drive Suite 500 Novi, MI 48377

Dear Mrs. Samp,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

By Sue Ricketts at 12:26 PM, Apr 06, 2022

For Daryl P. Strandbergh Laboratory Director

Enclosures



Order: A07755
Page: 2 of 10
Date: 04/06/22

11:45

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: FIELDBLANK_040422 Chain of Custody: 201041

Client Project Name: TRW Milford ZF Active Safety Sample No: Collect Date: 04/04/22

 (30046730)
 Sample Matrix:
 Blank: Field
 Collect Time:

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GO	C/MS			Aliquot ID:		A07755-001	Matrix:	Blank: Field			
Method: EPA 5030C/EPA 8260D				Desc	cription:	FIELDBLANK_04	10422				
						Prepai	ation	Ana	alysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.	
1. Acetone	U		μg/L	50	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF	
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF	
3. Benzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF	
4. Bromobenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF	
5. Bromochloromethane	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF	
6. Bromodichloromethane	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF	
7. Bromoform	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF	
8. Bromomethane	U	V- L-	μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF	
9.2-Butanone	U		μg/L	25	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF	
10. n-Butylbenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF	
11. sec-Butylbenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF	
12. tert-Butylbenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF	
13. Carbon Disulfide	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF	
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF	
15. Chlorobenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF	
16. Chloroethane	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF	
17. Chloroform	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF	
18. Chloromethane	U	V-	μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF	
19. 2-Chlorotoluene	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF	
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF	
21. Dibromochloromethane	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF	
22. Dibromomethane	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF	
23.1,2-Dichlorobenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF	
24.1,3-Dichlorobenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF	
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF	
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF	
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF	
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF	
29. 1,1-Dichloroethene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF	
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF	
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF	
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF	
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF	
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF	
35. Ethylbenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF	
36. Ethylene Dibromide	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF	

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order: A07755
Page: 3 of 10
Date: 04/06/22

11:45

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: FIELDBLANK_040422 Chain of Custody: 201041

Client Project Name: TRW Milford ZF Active Safety Sample No: Collect Date: 04/04/22

(30046730)

Client Project No: 30046730 Sample Matrix: Blank: Field Collect Time:

Sample Comments:

61. o-Xylene

‡ 62. Xylenes

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Aliquot ID: A07755-001 Matrix: Blank: Field Method: EPA 5030C/EPA 8260D Description: FIELDBLANK_040422 Preparation Analysis Parameter(s) Result O Units Reporting Limit Dilution P. Date P. Batch A. Date A. Batch Init. 37.2-Hexanone U μg/L 50 1.0 04/05/22 VI22D05B 04/06/22 00:21 VI22D05B JMF 38. Isopropylbenzene U μg/L 5.0 1.0 04/05/22 VI22D05B 04/06/22 00:21 VI22D05B JMF 39.4-Methyl-2-pentanone U 50 1.0 04/05/22 VI22D05B 04/06/22 00:21 VI22D05B **JMF** μg/L U 04/05/22 40. Methylene Chloride 5.0 1.0 VI22D05B 04/06/22 00:21 VI22D05B JMF μg/L 41.2-Methylnaphthalene U 5.0 1.0 04/05/22 VI22D05B 04/06/22 00:21 VI22D05B μg/L U 42 MTBF μg/L 5.0 10 04/05/22 VI22D05B 04/06/22 00:21 VI22D05B 43. Naphthalene U μg/L 5.0 1.0 04/05/22 VI22D05B 04/06/22 00:21 VI22D05B 44. n-Propylbenzene U 04/05/22 VI22D05B 04/06/22 00:21 VI22D05B μg/L 10 10 U 45. Styrene 1.0 1.0 04/05/22 VI22D05B 04/06/22 00:21 VI22D05B ua/L U 46.1,1,1,2-Tetrachloroethane μg/L 1.0 1.0 04/05/22 VI22D05B 04/06/22 00:21 VI22D05B **JMF** 47.1,1,2,2-Tetrachloroethane U 1.0 1.0 04/05/22 VI22D05B 04/06/22 00:21 VI22D05B **JMF** μg/L 48. Tetrachloroethene U μg/L 1.0 1.0 04/05/22 VI22D05B 04/06/22 00:21 VI22D05B **JMF** 49. Toluene U 1.0 1.0 04/05/22 VI22D05B 04/06/22 00:21 VI22D05B μg/L JMF 50.1,2,4-Trichlorobenzene U 5.0 1.0 04/05/22 VI22D05B 04/06/22 00:21 VI22D05B μg/L 51.1,1,1-Trichloroethane u 1.0 1.0 04/05/22 VI22D05B 04/06/22 00:21 VI22D05B JMF μg/L 52.1,1,2-Trichloroethane U 1.0 04/05/22 VI22D05B 04/06/22 00:21 VI22D05B μg/L 1.0 1.0 53. Trichloroethene U 1.0 04/05/22 VI22D05B 04/06/22 00:21 VI22D05B JMF μg/L U 04/05/22 VI22D05B 04/06/22 00:21 VI22D05B 54. Trichlorofluoromethane μg/L 1.0 1.0 55.1,2,3-Trichloropropane U 1.0 04/05/22 VI22D05B 04/06/22 00:21 VI22D05B .IMF μg/L 10 U ‡ 56.1,2,3-Trimethylbenzene 1.0 1.0 04/05/22 VI22D05B 04/06/22 00:21 VI22D05B μg/L U VI22D05B 57.1,2,4-Trimethylbenzene 1.0 1.0 04/05/22 VI22D05B μg/L 04/06/22 00:21 JMF 58.1,3,5-Trimethylbenzene U μg/L 1.0 1.0 04/05/22 VI22D05B 04/06/22 00:21 VI22D05B 59. Vinyl Chloride U μg/L 1.0 1.0 04/05/22 VI22D05B 04/06/22 00:21 VI22D05B JMF 60. m&p-Xylene U 2.0 1.0 04/05/22 VI22D05B VI22D05B JMF μq/L 04/06/22 00:21

1.0

3.0

1.0

1.0

04/05/22

04/05/22

VI22D05B

04/06/22 00:21

VI22D05B 04/06/22 00:21 VI22D05B

VI22D05B

JMF

U

U

μg/L

μg/L



Order: A07755 Page: 4 of 10 Date: 04/06/22

11:55

Sample Description: **OW-16D2_040422** Client Identification: Arcadis U.S., Inc. - Novi Chain of Custody: 201041

Client Project Name: TRW Milford ZF Active Safety 04/04/22 Sample No: Collect Date: (30046730)

Client Project No: 30046730 Sample Matrix: **Ground Water** Collect Time:

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable #: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC Method: EPA 5030C/EPA 8260D	/MS			•	uot ID: cription:	A07755-002 OW-16D2_040422		: Ground Water			
						Prepara	tion	Ana	alysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.	
1. Acetone	U		μg/L	50	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF	
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF	
3. Benzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF	
4. Bromobenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF	
5. Bromochloromethane	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF	
6. Bromodichloromethane	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF	
7. Bromoform	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF	
8. Bromomethane	U	V- L-	μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF	
9.2-Butanone	U		μg/L	25	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF	
10. n-Butylbenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF	
11. sec-Butylbenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF	
12. tert-Butylbenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF	
13. Carbon Disulfide	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF	
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF	
15. Chlorobenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF	
16. Chloroethane	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF	
17. Chloroform	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF	
18. Chloromethane	U	V-	μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF	
19.2-Chlorotoluene	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF	
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF	
21. Dibromochloromethane	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF	
22. Dibromomethane	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF	
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF	
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF	
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF	
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF	
27. 1,1-Dichloroethane	3.5		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF	
28. 1,2-Dichloroethane	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF	
29.1,1-Dichloroethene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF	
30. cis-1,2-Dichloroethene	19		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF	
31. trans-1,2-Dichloroethene	1.7		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF	
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF	
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF	
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF	
35. Ethylbenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B		VI22D05B	JMF	
36. Ethylene Dibromide	U		μg/L	1.0	1.0	04/05/22		04/06/22 02:59		JMF	

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Order: A07755 Page: 5 of 10 Date: 04/06/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: **OW-16D2_040422** Chain of Custody: 201041

Client Project Name: TRW Milford ZF Active Safety 04/04/22 Collect Date: Sample No: (30046730)

Client Project No: 30046730 Sample Matrix: **Ground Water** Collect Time: 11:55

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable #: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by	GC/MS		Ali	quot ID:	A07755-002	Matrix:			
Method: EPA 5030C/EPA 8260D			De	scription:	OW-16D2_040422				
					Prepara	tion	An	alysis	
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
37.2-Hexanone	U	μg/L	50	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
38. Isopropylbenzene	U	μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
39.4-Methyl-2-pentanone	U	μg/L	50	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
40. Methylene Chloride	U	μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
‡ 41.2-Methylnaphthalene	U	μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
42. MTBE	U	μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
43. Naphthalene	U	μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
44. n-Propylbenzene	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
45. Styrene	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
46.1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
47.1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
48. Tetrachloroethene	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
49. Toluene	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
50.1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
‡ 52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
53. Trichloroethene	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
55.1,2,3-Trichloropropane	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
‡ 56.1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
57.1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
58.1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
59. Vinyl Chloride	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
60. m&p-Xylene	U	μg/L	2.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
61. o-Xylene	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
‡ 62. Xylenes	U	μg/L	3.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF

DCSID: G-610.20 (08/26/2021)



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Date: 04/06/22

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Client Identification: Arcadis U.S., Inc. - Novi Sample Description: EQUIPMENTBLANK_040422 Chain of Custody: 201041

Client Project Name: TRW Milford ZF Active Safety Sample No: Collect Date: 04/04/22

(30046730)

Client Project No: 30046730 Sample Matrix: Blank: Equipment Collect Time:

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/N Method: EPA 5030C/EPA 8260D	ıs			•	uot ID: cription:	A07755-003 EQUIPMENTBLA		Blank: Equipme	nt	
						Prepar			alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U		μg/L	50	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
3. Benzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
4. Bromobenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
5. Bromochloromethane	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
6. Bromodichloromethane	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
7. Bromoform	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
8. Bromomethane	U	V- L-	μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
9.2-Butanone	U		μg/L	25	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
10. n-Butylbenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
11. sec-Butylbenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
12. tert-Butylbenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
13. Carbon Disulfide	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
15. Chlorobenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
16. Chloroethane	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
17. Chloroform	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
18. Chloromethane	U	V-	μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
19.2-Chlorotoluene	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
21. Dibromochloromethane	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
22. Dibromomethane	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
23.1,2-Dichlorobenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
29.1,1-Dichloroethene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	04/05/22	VI22D05B	04/06/22 00:48		
35. Ethylbenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48		
36. Ethylene Dibromide	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48		

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12:10

Sample Description: **EQUIPMENTBLANK_040422** Client Identification: Arcadis U.S., Inc. - Novi Chain of Custody: 201041

Client Project Name: TRW Milford ZF Active Safety 04/04/22 Collect Date: Sample No:

(30046730) Client Project No: 30046730 Sample Matrix: Blank: Equipment Collect Time:

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable #: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by G Method: EPA 5030C/EPA 8260D		juot ID:	A07755-003		Blank: Equipme	nt			
Method: EPA 5030C/EPA 8260D			Des	cription:	EQUIPMENTBLA		Λ.σ.		
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	Prepa P. Date	P. Batch	A. Date	alysis A. Batch	Init.
37.2-Hexanone	U	μg/L	50	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
38. Isopropylbenzene	U	μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:48		JMF
39. 4-Methyl-2-pentanone	U	μg/L	50	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
40. Methylene Chloride	U	μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:48		JMF
‡ 41.2-Methylnaphthalene	U	μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
42.MTBE	U	μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
43. Naphthalene	U	μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
44. n-Propylbenzene	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
45. Styrene	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
46. 1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
47.1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
48. Tetrachloroethene	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
49. Toluene	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
50.1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
53. Trichloroethene	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
55. 1,2,3-Trichloropropane	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
56. 1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
57. 1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
58. 1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
59. Vinyl Chloride	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
60. m&p-Xylene	U	μg/L	2.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
61.o-Xylene	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
‡ 62. Xylenes	U	μg/L	3.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF

DCSID: G-610.20 (08/26/2021)



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Client Identification: Arcadis U.S., Inc. - Novi Sample Description: TRIP BLANK Chain of Custody: N/A

Client Project Name: TRW Milford ZF Active Safety Sample No: Collect Date: 04/04/22

Aliquot ID:

A07755-004

Matrix: Blank: Trip

(30046730)

Volatile Organic Compounds (VOCs) by GC/MS

Client Project No: 30046730 Sample Matrix: Blank: Trip Collect Time: NA

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Method: EPA 5030C/EPA 8260D				_		TRIP BLANK	маттх: ыапк: ттр						
					<u>.</u>	Prepar	ation	Ana	alysis				
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.			
1. Acetone	U		μg/L	50	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF			
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF			
3. Benzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF			
4. Bromobenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF			
5. Bromochloromethane	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF			
6. Bromodichloromethane	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF			
7. Bromoform	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF			
8. Bromomethane	U	V- L-	μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF			
9.2-Butanone	U		μg/L	25	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF			
10. n-Butylbenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF			
11. sec-Butylbenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF			
12. tert-Butylbenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF			
13. Carbon Disulfide	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF			
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF			
15. Chlorobenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF			
16. Chloroethane	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF			
17. Chloroform	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF			
18. Chloromethane	U	V-	μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF			
19.2-Chlorotoluene	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF			
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF			
21. Dibromochloromethane	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF			
22. Dibromomethane	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF			
23.1,2-Dichlorobenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF			
24.1,3-Dichlorobenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF			
25.1,4-Dichlorobenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF			
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF			
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF			
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF			
29.1,1-Dichloroethene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF			
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF			
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF			
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF			
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF			
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF			
35. Ethylbenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF			
36. Ethylene Dibromide	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF			

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order: A07755 Page: 9 of 10 Date: 04/06/22

NA

Arcadis U.S., Inc. - Novi Sample Description: TRIP BLANK N/A Client Identification: Chain of Custody:

Client Project Name: TRW Milford ZF Active Safety Collect Date: 04/04/22 Sample No: (30046730)

Client Project No: 30046730 Sample Matrix: Blank: Trip Collect Time:

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable #: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS			Aliq	uot ID:	A07755-004	Matrix:			
Method: EPA 5030C/EPA 8260D			Des	cription:	TRIP BLANK				
					Prepa	ration	An	alysis	
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
37.2-Hexanone	U	μg/L	50	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
38. Isopropylbenzene	U	μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
39. 4-Methyl-2-pentanone	U	μg/L	50	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
40. Methylene Chloride	U	μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
‡ 41.2-Methylnaphthalene	U	μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
42.MTBE	U	μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
43. Naphthalene	U	μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
44. n-Propylbenzene	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
45. Styrene	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
46.1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
47.1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
48. Tetrachloroethene	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
49. Toluene	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
50.1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
‡ 52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
53. Trichloroethene	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
55.1,2,3-Trichloropropane	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
‡ 56.1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
57.1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
58.1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
59. Vinyl Chloride	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
60. m&p-Xylene	U	μg/L	2.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
61. o-Xylene	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
‡ 62. Xylenes	U	μg/L	3.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF

DCSID: G-610.20 (08/26/2021)



Analytical Laboratory Report Laboratory Project Number: A07755

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Date: 04/06/22

Definitions/ Qualifiers:

- **A:** Spike recovery or precision unusable due to dilution.
- **B:** The analyte was detected in the associated method blank.
- E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
- J: The concentration is an estimated value.
- M: Modified Method
- U: The analyte was not detected at or above the reporting limit.
- X: Matrix Interference has resulted in a raised reporting limit or distorted result.
- W: Results reported on a wet-weight basis.
- *: Value reported is outside QC limits

Exception Summary:

L- : Recovery in the associated laboratory sample (LCS) exceeds the lower control limit. Results may be biased low.
 V- : Recovery in the associated continuing calibration verification sample (CCV) exceeds the lower control limit. Results may be biased low.

Analysis Locations:

All analyses performed in Holt.



Accreditation Number(s):

T104704518-19-8 (TX)

RSN: A07755-220406122339



Order ID: A07755 Page: 1 of 5 Date: 04/06/22

VI22D05B: Method Blank (MB)

Run Time: VI22D05B.MB 04/05/2022 23:54 [VI	22D05B]				
	MB Result	MB MB RDL			
		Qualifier			
Analyte	μg/L	μg/L			
Acetone	U	50			
Acrylonitrile	U	2.0			
Benzene	U	1.0			
Bromobenzene	U	1.0			
Bromochloromethane	U	1.0			
Bromodichloromethane	U	1.0			
Bromoform	U	1.0			
Bromomethane	U	5.0			
2-Butanone	U	25			
n-Butylbenzene	U	1.0			
sec-Butylbenzene	U	1.0			
tert-Butylbenzene	U	1.0			
Carbon Disulfide	U	5.0			
Carbon Tetrachloride	U	1.0			
Chlorobenzene	U	1.0			
Chloroethane	U	5.0			
Chloroform	U	1.0			
Chloromethane	U	5.0			
2-Chlorotoluene	U	5.0			
1,2-Dibromo-3-chloropropane (SIM)	U	1.0			
Dibromochloromethane	U	5.0			
Dibromomethane	U	5.0			
1,2-Dichlorobenzene	U	1.0			
1,3-Dichlorobenzene	U	1.0			
1,4-Dichlorobenzene	U	1.0			
Dichlorodifluoromethane	U	5.0			
1,1-Dichloroethane	U	1.0			
1,2-Dichloroethane	U	1.0			
1,1-Dichloroethene	U	1.0			
cis-1,2-Dichloroethene	U	1.0			
trans-1,2-Dichloroethene	U	1.0			
1,2-Dichloropropane	U	1.0			
cis-1,3-Dichloropropene	U	0.50			
	1914 Holloway Drive	Holt, MI 48842	T: (517) 699-0345	F: (517) 699-0388	

DCSID: G-6017.2 (06/10/2020) | lab@fibertec.us | RSN: VI22D05B-22960406123105

T: (810) 220-3300

T: (231) 775-8368

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F: (231) 775-8584

Brighton, MI 48116

Cadillac, MI 49601

11766 E. Grand River

8660 S. Mackinaw Trail



Order ID: A07755 Page: 2 of 5 Date: 04/06/22

VI22D05B: Method Blank (MB)

Run Time: VI22D05B.MB 04/05/2022			
	MB Result	MB	MB RDL
		Qualifier	
Analyte	μg/L		μg/L
trans-1,3-Dichloropropene	U		0.50
Ethylbenzene	U		1.0
Ethylene Dibromide	U		1.0
2-Hexanone	U		50
Isopropylbenzene	U		5.0
4-Methyl-2-pentanone	U		50
Methylene Chloride	U		5.0
2-Methylnaphthalene	U		5.0
MTBE	U		5.0
Naphthalene	U		5.0
n-Propylbenzene	U		1.0
Styrene	U		1.0
1,1,1,2-Tetrachloroethane	U		1.0
1,1,2,2-Tetrachloroethane	U		1.0
Tetrachloroethene	U		1.0
Toluene	U		1.0
1,2,4-Trichlorobenzene	U		5.0
1,1,1-Trichloroethane	U		1.0
1,1,2-Trichloroethane	U		1.0
Trichloroethene	U		1.0
Trichlorofluoromethane	U		1.0
1,2,3-Trichloropropane	U		1.0
1,2,3-Trimethylbenzene	U		1.0
1,2,4-Trimethylbenzene	U		1.0
1,3,5-Trimethylbenzene	U		1.0
Vinyl Chloride	U		1.0
m&p-Xylene	U		2.0
o-Xylene	U		1.0
4-Bromofluorobenzene(S)	100		80-120
Dibromofluoromethane(S)	101		80-120
1,2-Dichloroethane-d4(S)	94		80-120
Toluene-d8(S)	99		80-120

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Order ID: A07755 Page: 3 of 5 Date: 04/06/22

VI22D05B: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VI22D05B.LCS: 04/05/2022 22:09 [05B.LCSD: 04/05/20	-	-	1.00	1.000	1.000	1.000	1.000	DDD	DDD Limits	DDD
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD Qualifier
Analyte	Spike Am μg/L	ount μg/L	%	%	Qualifier	Spike Amount μg/L	μg/L	Rec. %	Qualifier	%	%	Qualifier
Acetone	50.0	30.6	61	54-140		50.0	31.1	62		2	20	
Acrylonitrile	50.0	52.7	105	70-130		50.0	53.7	107		2	20	
Benzene	50.0	46.5	93	80-120		50.0	45.1	90		3	20	
Bromobenzene	50.0	44.7	89	75-125		50.0	44.2	88		1	20	
Bromochloromethane	50.0	40.7	81	70-130		50.0	40.1	80		1	20	
Bromodichloromethane	50.0	44.5	89	75-120		50.0	43.5	87		2	20	
Bromoform	50.0	45.8	92	70-130		50.0	45.4	91		1	20	
Bromomethane	50.0	27.5	55	68-135	*	50.0	29.1	58	*	5	20	
2-Butanone	50.0	40.1	80	70-148		50.0	40.5	81		1	20	
n-Butylbenzene	50.0	52.8	106	70-133		50.0	51.9	104		2	20	
sec-Butylbenzene	50.0	50.2	100	70-125		50.0	49.4	99		1	20	
ert-Butylbenzene	50.0	49.5	99	70-130		50.0	48.6	97		2	20	
Carbon Disulfide	50.0	44.6	89	70-130		50.0	42.8	86		3	20	
Carbon Tetrachloride	50.0	44.5	89	70-130		50.0	43.3	87		2	20	
Chlorobenzene	50.0	45.9	92	80-120		50.0	44.8	90		2	20	
Chloroethane	50.0	40.5	81	61-130		50.0	39.1	78		4	20	
Chloroform	50.0	44.2	88	80-120		50.0	43.4	87		1	20	
Chloromethane	50.0	38.4	77	67-125		50.0	38.9	78		1	20	
2-Chlorotoluene	50.0	47.3	95	75-125		50.0	46.6	93		2	20	
,2-Dibromo-3-chloropropane (SIM)	50.0	48.5	97	70-130		50.0	49.6	99		2	20	
Dibromochloromethane	50.0	44.6	89	70-130		50.0	43.3	87		2	20	
Dibromomethane	50.0	41.6	83	75-125		50.0	40.4	81		2	20	
1,2-Dichlorobenzene	50.0	46.9	94	70-120		50.0	46.2	92		2	20	
1,3-Dichlorobenzene	50.0	45.8	92	75-125		50.0	45.0	90		2	20	
1,4-Dichlorobenzene	50.0	43.3	87	75-125		50.0	42.5	85		2	20	
Dichlorodifluoromethane	50.0	53.5	107	70-136		50.0	51.0	102		5	20	
1,1-Dichloroethane	50.0	45.9	92	70-130		50.0	44.5	89		3	20	
,2-Dichloroethane	50.0	40.9	82	70-130		50.0	39.7	79		4	20	
,1-Dichloroethene	50.0	43.8	88	78-120		50.0	42.1	84		5	20	
cis-1,2-Dichloroethene	50.0	44.8	90	70-125		50.0	43.2	86		5	20	
trans-1,2-Dichloroethene	50.0	44.5	89	70-130		50.0	43.5	87		2	20	
1,2-Dichloropropane	50.0	49.1	98	80-121		50.0	47.4	95		3	20	
cis-1,3-Dichloropropene	50.0	43.4	87	70-130		50.0	42.2	84		4	20	

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Order ID: A07755 Page: 4 of 5 Date: 04/06/22

VI22D05B: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VI22D05B.LCS: 04/05/2022 22:	09 [VI22D05B] VI22D0	5B.LCSD: 04/05/20)22 22:35 [VI22	D05B]								
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Am	ount			Qualifier	Spike Amoun	t Result	Rec.	Qualifier			Qualifier
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
trans-1,3-Dichloropropene	50.0	48.2	96	70-132		50.0	46.7	93		3	20	
Ethylbenzene	50.0	48.4	97	80-120		50.0	47.0	94		3	20	
Ethylene Dibromide	50.0	45.2	90	80-120		50.0	44.4	89		1	20	
2-Hexanone	50.0	39.4	79	70-130		50.0	40.5	81		3	20	
Isopropylbenzene	50.0	48.7	97	75-125		50.0	47.5	95		2	20	
4-Methyl-2-pentanone	50.0	55.2	110	70-130		50.0	54.7	109		1	20	
Methylene Chloride	50.0	43.8	88	70-130		50.0	42.7	85		3	20	
2-Methylnaphthalene	50.0	46.0	92	70-130		50.0	46.5	93		1	20	
MTBE	50.0	48.3	97	70-125		50.0	47.3	95		2	20	
Naphthalene	50.0	46.7	93	70-130		50.0	47.5	95		2	20	
n-Propylbenzene	50.0	49.4	99	70-130		50.0	48.8	98		1	20	
Styrene	50.0	41.0	82	70-130		50.0	39.7	79		4	20	
1,1,1,2-Tetrachloroethane	50.0	46.7	93	80-130		50.0	45.2	90		3	20	
1,1,2,2-Tetrachloroethane	50.0	59.4	119	70-130		50.0	60.5	121		2	20	
Tetrachloroethene	50.0	48.5	97	70-130		50.0	46.9	94		3	20	
Toluene	50.0	47.9	96	80-120		50.0	46.4	93		3	20	
1,2,4-Trichlorobenzene	50.0	45.9	92	70-130		50.0	46.0	92		0	20	
1,1,1-Trichloroethane	50.0	45.5	91	70-130		50.0	44.3	89		2	20	
1,1,2-Trichloroethane	50.0	47.6	95	75-125		50.0	47.1	94		1	20	
Trichloroethene	50.0	41.6	83	71-125		50.0	39.9	80		4	20	
Trichlorofluoromethane	50.0	48.2	96	70-133		50.0	46.6	93		3	20	
1,2,3-Trichloropropane	50.0	49.9	100	75-125		50.0	49.3	99		1	20	
1,2,3-Trimethylbenzene	50.0	47.0	94	70-130		50.0	46.2	92		2	20	
1,2,4-Trimethylbenzene	50.0	49.1	98	75-130		50.0	48.7	97		1	20	
1,3,5-Trimethylbenzene	50.0	49.1	98	75-130		50.0	48.1	96		2	20	
Vinyl Chloride	50.0	43.9	88	74-125		50.0	42.2	84		5	20	
n&p-Xylene	100	95.1	95	75-130		100	92.8	93		2	20	
o-Xylene	50.0	47.9	96	80-120		50.0	46.3	93		3	20	
4-Bromofluorobenzene(S)			100	80-120				101				
Dibromofluoromethane(S)			99	80-120				98				
1,2-Dichloroethane-d4(S)			91	80-120				90				
Toluene-d8(S)			100	80-120				100				

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Order ID: A07755 Page: 5 of 5 Date: 04/06/22

Definitions/ Qualifiers:

- U: The analyte was not detected at or above the Reporting Limit (RL).
- *: Value reported is outside QC limits

Exception Summary:

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

Report Generated By:

By Sue Ricketts at 12:32 PM, Apr 06, 2022

RSN: VI22D05B-22960406123105

FiberteC environmental services

Analytical Laboratory

1914 Holloway Drive Holt, MI 48842

Phone: 517 699 0345 Fax: 517 699 0388

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Andry lical Education

8660 \$. Mackinaw Trail Cadillac, MI 49601

Phone: 231 775 8368 Fax: 231 775 8584 Geoprobe

11766 E. Grand River Rd. Brighton, MI 48116

Phone: 810 220 3300 Fax: 810 220 3311 Chain of Custody # 201041
PAGE ____ of ____

Client Nam	ne: Avc	adis						PARAME	TERS		I	Matrix Code Deliverables
Contact Pe	erson: M	LING	Jamp			8						S Soil Gw Ground Water A Air Sw Surface Water Level 3
TRW	Millon	10	30046730	R CODE)		g					필	O Oil WW Waste Water Level 4
Email distrib	oution list:	inte	30046730 Darcadis com	MATRIX (SEE RIGHT CORNER FOR CODE)	ERS	87 LOB					HOLD SAMPLE	P Wipe X Other: Specify EDD
Quote#	I IVICI		real Charles Conve	E RIGHT	I A I	1 1					일 모	
Purchase (130.000IZ	ATRIX (SE	# OF CONTAINERS	YOUS				Н		
Date	Time	Sample #			#	3	+++		+		+	Remarks:
4.4.2		-	FIELDBLANK_040422	6W	3	3	+++	100	+	-	+	
4.4.22			0W-16D2-040422	_		3	+	++	+		+	+
4.4.22	1210		EQUIPMENTBLANK_040422	GW	3	2			+			Received By Lab
												APR 0 4 2022
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Relinquishe	d By:	lase	tich/Arradis	Date	/ Time	12	1415	Receive	во Ву:	+00	-	4 A
Relinquishe	d By:	Manc	TICHTAICACIS		/ Time		1710	Receive	ed By L	aboratory	<u>)</u> (:	(me)
		Tu	urnaround Time ALL RESULTS WILL BE SENT BY THE END O	F THE BU	JSINE	SS DAY		1	_	1	_	LAB USE ONLY
1 b	us. day	X_2	bus, day (48)3 bus, days							Fibert	ec pr	roject number: AO7755
5-7	bus, days (sto	andard)	Other (specify time/date requirement):							Temp	eratu	re upon receipt at Lab: 2.0%
			Pleas	se see	bc	ick fo	or terms a	nd con	ditior	ns		



Tuesday, April 12, 2022

Fibertec Project Number:

A07873

Project Identification:

TRW Milford ZF Active Safety (30046730) /30046730

Submittal Date:

04/08/2022

Mrs. Marina Samp Arcadis U.S., Inc. - Novi 28550 Cabot Drive Suite 500 Novi, MI 48377

Dear Mrs. Samp,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

By Sue Ricketts at 1:11 PM, Apr 12, 2022

For Daryl P. Strandbergh Laboratory Director

Enclosures



Order: A07873 Date: 04/12/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Field Blank-040822 Chain of Custody: 207003

Client Project Name: TRW Milford ZF Active Safety Sample No: Collect Date: 04/08/22

Aliquot ID:

A07873-001

Matrix: Blank: Field

(30046730)

Client Project No: 30046730 Sample Matrix: Blank: Field Collect Time: 10:35

Sample Comments:

Volatile Organic Compounds (VOCs) by GC/MS

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Method: EPA 5030C/EPA 8260D				Des	cription: F	ield Blank-0408	22			
						Prepar	ation	An	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U		μg/L	50	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
3. Benzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
4. Bromobenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
5. Bromochloromethane	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
6. Bromodichloromethane	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
7. Bromoform	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
8. Bromomethane	U		μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
9.2-Butanone	U		μg/L	25	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
10. n-Butylbenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
11. sec-Butylbenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
12. tert-Butylbenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
13. Carbon Disulfide	U		μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
15. Chlorobenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
16. Chloroethane	U		μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
17. Chloroform	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
18. Chloromethane	U	V+ L+	μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
19.2-Chlorotoluene	U		μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
21. Dibromochloromethane	U		μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
22. Dibromomethane	U		μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
23.1,2-Dichlorobenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
24.1,3-Dichlorobenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
29.1,1-Dichloroethene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
35. Ethylbenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
36. Ethylene Dibromide	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order: A07873 04/12/22 Date:

207003 Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Field Blank-040822 Chain of Custody:

Client Project Name: TRW Milford ZF Active Safety 04/08/22 Collect Date: Sample No: (30046730)

Client Project No: 30046730 Sample Matrix: Blank: Field Collect Time: 10:35

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GO	C/MS			Alic	uot ID:	A07873-001	Matrix:	Blank: Field		
Method: EPA 5030C/EPA 8260D				Des	cription:	Field Blank-04082	2			
						Prepara	tion	An	alysis	
Parameter(s)	Result	Q U	nits	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
37.2-Hexanone	U	μ	g/L	50	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
38. Isopropylbenzene	U	μ	g/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
39.4-Methyl-2-pentanone	U	μ	g/L	50	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
40. Methylene Chloride	U	μ	g/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
‡ 41.2-Methylnaphthalene	U	μ	g/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
42.MTBE	U	μ	g/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
43. Naphthalene	U	μ	g/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
44. n-Propylbenzene	U	μ	g/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
45. Styrene	U	μ	g/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
46.1,1,1,2-Tetrachloroethane	U	μ	g/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
47.1,1,2,2-Tetrachloroethane	U	μ	g/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
48. Tetrachloroethene	U	μ	g/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
49. Toluene	U	μ	g/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
50.1,2,4-Trichlorobenzene	U	μ	g/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
51.1,1,1-Trichloroethane	U	μ	g/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
52. 1,1,2-Trichloroethane	U	μ	g/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
53. Trichloroethene	U	μ	g/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
54. Trichlorofluoromethane	U	μ	g/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
55.1,2,3-Trichloropropane	U	μ	g/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
56.1,2,3-Trimethylbenzene	U	μ	g/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
57. 1,2,4-Trimethylbenzene	U	μ	g/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
58.1,3,5-Trimethylbenzene	U	μ	g/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
59. Vinyl Chloride	U	μ	g/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
60. m&p-Xylene	U	μ	g/L	2.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
61. o-Xylene	U	μ	g/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
‡ 62. Xylenes	U	μ	g/L	3.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM



Order: A07873 Date: 04/12/22

Matrix: Ground Water

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2-040822 Chain of Custody: 207003

Client Project Name: TRW Milford ZF Active Safety Sample No: Collect Date: 04/08/22 (30046730)

Aliquot ID:

A07873-002

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 11:35

Sample Comments:

Volatile Organic Compounds (VOCs) by GC/MS

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Method: EPA 5030C/EPA 8260D				Des	cription:	OW-16D2-040822	!			
						Prepar	ation	An	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U		μg/L	50	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
3. Benzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
4. Bromobenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
5. Bromochloromethane	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
6. Bromodichloromethane	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
7. Bromoform	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
8. Bromomethane	U		μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
9.2-Butanone	U		μg/L	25	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
10. n-Butylbenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
11. sec-Butylbenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
12. tert-Butylbenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
13. Carbon Disulfide	U		μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
15. Chlorobenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
16. Chloroethane	U		μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
17. Chloroform	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
18. Chloromethane	U	V+ L+	μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
19.2-Chlorotoluene	U		μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
21. Dibromochloromethane	U		μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
22. Dibromomethane	U		μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
23.1,2-Dichlorobenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
24.1,3-Dichlorobenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
25.1,4-Dichlorobenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
27.1,1-Dichloroethane	3.5		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
29.1,1-Dichloroethene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
30. cis-1,2-Dichloroethene	20		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
31. trans-1,2-Dichloroethene	1.5		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
35. Ethylbenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
36. Ethylene Dibromide	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order: A07873 Date: 04/12/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2-040822 Chain of Custody: 207003

Client Project Name: TRW Milford ZF Active Safety Sample No: Collect Date: 04/08/22 (30046730)

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 11:35

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/	MS					A07873-002	Matrix: (Ground Water		
Method: EPA 5030C/EPA 8260D				Desc	ription:	OW-16D2-040822			.1	
Parameter(s)	Result	Q Un	ts Re	eporting Limit	Dilution	Prepara P. Date	tion P. Batch	An. Date	alysis A. Batch	Init.
37.2-Hexanone	U	μg	L	50	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
38. Isopropylbenzene	U	μg	L	5.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
39.4-Methyl-2-pentanone	U	μg	L	50	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
40. Methylene Chloride	U	μg	L	5.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
‡ 41.2-Methylnaphthalene	U	μg	L	5.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
42. MTBE	U	μg	L	5.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
43. Naphthalene	U	μg	L	5.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
44. n-Propylbenzene	U	μg	L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
45. Styrene	U	μg	L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
46. 1,1,1,2-Tetrachloroethane	U	μg	L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
47.1,1,2,2-Tetrachloroethane	U	μg	L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
48. Tetrachloroethene	U	μg	L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
49. Toluene	U	μg	L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
50.1,2,4-Trichlorobenzene	U	μg	L	5.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
51.1,1,1-Trichloroethane	U	μg	L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
‡ 52.1,1,2-Trichloroethane	U	μg	L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
53. Trichloroethene	U	μg	L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
54. Trichlorofluoromethane	U	μg	L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
55. 1,2,3-Trichloropropane	U	μд	L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
‡ 56.1,2,3-Trimethylbenzene	U	μg	L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
57. 1,2,4-Trimethylbenzene	U	μg	L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
58. 1,3,5-Trimethylbenzene	U	μg	L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
59. Vinyl Chloride	U	μд	L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
60. m&p-Xylene	U	μg	L	2.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
61. o-Xylene	U	μg	L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
‡ 62. Xylenes	U	μg	L	3.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM



Order: A07873 Date: 04/12/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Trip Blank Chain of Custody: 207003

Client Project Name: TRW Milford ZF Active Safety Sample No: Collect Date: 04/08/22 (30046730)

Client Project No: 30046730 Sample Matrix: Blank: Trip Collect Time: NA

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable #: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC Method: EPA 5030C/EPA 8260D	/MS			•	uot ID:	A07873-003 Trip Blank	Matrix: I	Blank: Trip		
Metriod. EFA 3030C/EFA 6200D				Desi	cription.	Prepa	ration	Δn	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution		P. Batch	A. Date	A. Batch	Init.
1. Acetone	U		μg/L	50	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
3. Benzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
4. Bromobenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
5. Bromochloromethane	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
6. Bromodichloromethane	U		μg/L	1.0	1.0	04/11/22		04/11/22 19:33		
7. Bromoform	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
8. Bromomethane	U		μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
9.2-Butanone	U		μg/L	25	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
10. n-Butylbenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
11. sec-Butylbenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
12. tert-Butylbenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
13. Carbon Disulfide	U		μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
15. Chlorobenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
16. Chloroethane	U		μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
17. Chloroform	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
18. Chloromethane	U	V+ L+	μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
19.2-Chlorotoluene	U		μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
21. Dibromochloromethane	U		μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
22. Dibromomethane	U		μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
23.1,2-Dichlorobenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
24.1,3-Dichlorobenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
29.1,1-Dichloroethene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
35. Ethylbenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
36. Ethylene Dibromide	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN

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Order: A07873 Date: 04/12/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Trip Blank Chain of Custody: 207003

Client Project Name: TRW Milford ZF Active Safety Sample No: Collect Date: 04/08/22 (30046730)

Client Project No: 30046730 Sample Matrix: Blank: Trip Collect Time: NA

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC	/MS				A07873-003	Matrix: E	Blank: Trip		
Method: EPA 5030C/EPA 8260D			Des	scription:	Trip Blank				
Parameter(s)	Result	Q Units	Reporting Limit	Dilution		ration P. Batch	An A. Date	alysis A. Batch	Init.
37.2-Hexanone	U	μg/L	50	1.0	04/11/22		04/11/22 19:33		
38. Isopropylbenzene	U	μg/L	5.0	1.0	04/11/22		04/11/22 19:33		
39. 4-Methyl-2-pentanone	U	μg/L	50	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
40. Methylene Chloride	U	μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
‡ 41.2-Methylnaphthalene	U	μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
42. MTBE	U	μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
43. Naphthalene	U	μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
44. n-Propylbenzene	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
45. Styrene	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
46.1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
47.1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
48. Tetrachloroethene	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
49. Toluene	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
50.1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
‡ 52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
53. Trichloroethene	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
55. 1,2,3-Trichloropropane	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
56. 1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
57. 1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
58.1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
59. Vinyl Chloride	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
60.m&p-Xylene	U	μg/L	2.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
61.o-Xylene	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
‡ 62. Xylenes	U	μg/L	3.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM



Analytical Laboratory Report Laboratory Project Number: A07873

Order: A07873 Date: 04/12/22

Definitions/ Qualifiers:

- A: Spike recovery or precision unusable due to dilution.
- B: The analyte was detected in the associated method blank.
- E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
- J: The concentration is an estimated value.
- M: Modified Method
- U: The analyte was not detected at or above the reporting limit.
- X: Matrix Interference has resulted in a raised reporting limit or distorted result.
- W: Results reported on a wet-weight basis.
- *: Value reported is outside QC limits

Exception Summary:

L+ : Recovery in the associated laboratory sample (LCS) exceeds the upper control limit. Results may be biased high.
 V+ : Recovery in the associated continuing calibration verification sample (CCV) exceeds the upper control limit. Results may be biased high.

Analysis Locations:

All analyses performed in Holt.



Accreditation Number(s):

T104704518-19-8 (TX)

lab@fibertec.us

Page:



Order ID: A07873 Page: 1 of 5 Date: 04/12/22

VB22D11B: Method Blank (MB)

Run Time: VB22D11B.MB 04/11/2022 17:19	[VB22D11B]	
	MB Result	MB MB RDL
		Qualifier
Analyte	μg/L	μg/L
Acetone	U	50
Acrylonitrile	U	2.0
Benzene	U	1.0
Bromobenzene	U	1.0
Bromochloromethane	U	1.0
Bromodichloromethane	U	1.0
Bromoform	U	1.0
Bromomethane	U	5.0
2-Butanone	U	25
n-Butylbenzene	U	1.0
sec-Butylbenzene	U	1.0
tert-Butylbenzene	U	1.0
Carbon Disulfide	U	5.0
Carbon Tetrachloride	U	1.0
Chlorobenzene	U	1.0
Chloroethane	U	5.0
Chloroform	U	1.0
Chloromethane	U	5.0
2-Chlorotoluene	U	5.0
1,2-Dibromo-3-chloropropane (SIM)	U	1.0
Dibromochloromethane	U	5.0
Dibromomethane	U	5.0
1,2-Dichlorobenzene	U	1.0
1,3-Dichlorobenzene	U	1.0
1,4-Dichlorobenzene	U	1.0
Dichlorodifluoromethane	U	5.0
1,1-Dichloroethane	U	1.0
1,2-Dichloroethane	U	1.0
1,1-Dichloroethene	U	1.0
cis-1,2-Dichloroethene	U	1.0
trans-1,2-Dichloroethene	U	1.0
1,2-Dichloropropane	U	1.0
cis-1,3-Dichloropropene	U	0.50
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
	1914 Holloway Drive	Holt, MI 48842

DCSID: G-6017.2 (06/10/2020) | lab@fibertec.us | RSN: VB22D11B-221020412131600

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Brighton, MI 48116

Cadillac, MI 49601

11766 E. Grand River

8660 S. Mackinaw Trail



Order ID: A07873 Page: 2 of 5 Date: 04/12/22

VB22D11B: Method Blank (MB)

Run Time: VB22D11B.MB 04/11/2022	17:19 [VB22D11B]		
	MB Result	MB M	B RDL
		Qualifier	
Analyte	μg/L		g/L
trans-1,3-Dichloropropene	U		50
Ethylbenzene	U	1.	
Ethylene Dibromide	U	1.	
2-Hexanone	U	50	
Isopropylbenzene	U	5.	
4-Methyl-2-pentanone	U	50	ס
Methylene Chloride	U	5.	0
2-Methylnaphthalene	U	5.	0
MTBE	U	5.	0
Naphthalene	U	5.	0
n-Propylbenzene	U	1.	0
Styrene	U	1.	0
1,1,1,2-Tetrachloroethane	U	1.	0
1,1,2,2-Tetrachloroethane	U	1.	0
Tetrachloroethene	U	1.	0
Toluene	U	1.	.0
1,2,4-Trichlorobenzene	U	5.	0
1,1,1-Trichloroethane	U	1.	.0
1,1,2-Trichloroethane	U	1.	0
Trichloroethene	U	1.	0
Trichlorofluoromethane	U	1.	0
1,2,3-Trichloropropane	U	1.	0
1,2,3-Trimethylbenzene	U	1.	
1,2,4-Trimethylbenzene	U	1.	
1,3,5-Trimethylbenzene	U	1.	
Vinyl Chloride	U	1.	
m&p-Xylene	U	2.	
o-Xylene	U	1.	
4-Bromofluorobenzene(S)	104		0-120
Dibromofluoromethane(S)	105		0-120
1,2-Dichloroethane-d4(S)	100		0-120
Toluene-d8(S)	102		0-120
25(5)	.02		

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Order ID: A07873 Page: 3 of 5 Date: 04/12/22

VB22D11B: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VB22D11B.LCS: 04/11/2022 15:31	-		·=·	נפווטבצטוו								
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Am	ount			Qualifier	Spike Amoun	t Result	Rec.	Qualifier			Qualifie
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
Acetone	50.0	38.5	77	54-140		50.0	40.0	80		4	20	
Acrylonitrile	50.0	54.7	109	70-130		50.0	54.1	108		1	20	
Benzene	50.0	48.4	97	80-120		50.0	47.1	94		3	20	
Bromobenzene	50.0	45.8	92	75-125		50.0	45.2	90		2	20	
Bromochloromethane	50.0	48.4	97	70-130		50.0	49.1	98		1	20	
Bromodichloromethane	50.0	50.1	100	75-120		50.0	49.1	98		2	20	
Bromoform	50.0	51.9	104	70-130		50.0	51.6	103		1	20	
Bromomethane	50.0	46.6	93	68-135		50.0	45.6	91		2	20	
2-Butanone	50.0	41.0	82	70-148		50.0	41.0	82		0	20	
n-Butylbenzene	50.0	53.9	108	70-133		50.0	52.5	105		3	20	
sec-Butylbenzene	50.0	51.2	102	70-125		50.0	49.4	99		3	20	
ert-Butylbenzene	50.0	49.3	99	70-130		50.0	48.1	96		3	20	
Carbon Disulfide	50.0	48.6	97	70-130		50.0	46.7	93		4	20	
Carbon Tetrachloride	50.0	52.9	106	70-130		50.0	52.4	105		1	20	
Chlorobenzene	50.0	47.8	96	80-120		50.0	46.6	93		3	20	
Chloroethane	50.0	48.1	96	61-130		50.0	46.6	93		3	20	
Chloroform	50.0	48.3	97	80-120		50.0	46.9	94		3	20	
Chloromethane	50.0	71.8	144	67-125	*	50.0	70.0	140	*	3	20	
2-Chlorotoluene	50.0	48.1	96	75-125		50.0	47.3	95		1	20	
1,2-Dibromo-3-chloropropane (SIM)	50.0	47.5	95	70-130		50.0	47.7	95		0	20	
Dibromochloromethane	50.0	48.5	97	70-130		50.0	48.7	97		0	20	
Dibromomethane	50.0	46.5	93	75-125		50.0	45.9	92		1	20	
1,2-Dichlorobenzene	50.0	47.0	94	70-120		50.0	46.6	93		1	20	
1,3-Dichlorobenzene	50.0	47.4	95	75-125		50.0	46.3	93		2	20	
1,4-Dichlorobenzene	50.0	45.3	91	75-125		50.0	44.5	89		2	20	
Dichlorodifluoromethane	50.0	60.4	121	70-136		50.0	57.0	114		6	20	
1,1-Dichloroethane	50.0	48.6	97	70-130		50.0	47.7	95		2	20	
1,2-Dichloroethane	50.0	45.9	92	70-130		50.0	45.3	91		1	20	
1,1-Dichloroethene	50.0	48.3	97	78-120		50.0	46.5	93		4	20	
cis-1,2-Dichloroethene	50.0	50.8	102	70-125		50.0	49.3	99		3	20	
rans-1,2-Dichloroethene	50.0	49.9	100	70-130		50.0	47.8	96		4	20	
1,2-Dichloropropane	50.0	51.0	102	80-121		50.0	50.7	101		1	20	
cis-1,3-Dichloropropene	50.0	49.4	99	70-130		50.0	48.7	97		2	20	

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Order ID: A07873 Page: 4 of 5 Date: 04/12/22

VB22D11B: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VB22D11B.LCS: 04/11/2022 15	5:31 [VB22D11B] VB22	D11B.LCSD: 04/11	/2022 15:58 [V	B22D11B]								
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Am	ount			Qualifier	Spike Amoun	t Result	Rec.	Qualifier			Qualifier
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
trans-1,3-Dichloropropene	50.0	53.5	107	70-132		50.0	53.0	106		1	20	
Ethylbenzene	50.0	50.8	102	80-120		50.0	49.2	98		4	20	
Ethylene Dibromide	50.0	49.2	98	80-120		50.0	48.5	97		1	20	
2-Hexanone	50.0	53.4	107	70-130		50.0	53.2	106		1	20	
Isopropylbenzene	50.0	52.0	104	75-125		50.0	50.4	101		3	20	
4-Methyl-2-pentanone	50.0	59.4	119	70-130		50.0	59.4	119		0	20	
Methylene Chloride	50.0	45.0	90	70-130		50.0	43.9	88		2	20	
2-Methylnaphthalene	50.0	46.5	93	70-130		50.0	46.0	92		1	20	
MTBE	50.0	51.4	103	70-125		50.0	51.6	103		0	20	
Naphthalene	50.0	49.5	99	70-130		50.0	49.7	99		0	20	
n-Propylbenzene	50.0	51.7	103	70-130		50.0	50.0	100		3	20	
Styrene	50.0	43.7	87	70-130		50.0	42.8	86		1	20	
1,1,1,2-Tetrachloroethane	50.0	50.6	101	80-130		50.0	49.3	99		2	20	
1,1,2,2-Tetrachloroethane	50.0	54.5	109	70-130		50.0	55.0	110		1	20	
Tetrachloroethene	50.0	51.6	103	70-130		50.0	48.3	97		6	20	
Toluene	50.0	51.0	102	80-120		50.0	49.6	99		3	20	
1,2,4-Trichlorobenzene	50.0	46.9	94	70-130		50.0	45.8	92		2	20	
1,1,1-Trichloroethane	50.0	52.7	105	70-130		50.0	51.0	102		3	20	
1,1,2-Trichloroethane	50.0	48.1	96	75-125		50.0	47.2	94		2	20	
Trichloroethene	50.0	46.6	93	71-125		50.0	45.7	91		2	20	
Trichlorofluoromethane	50.0	48.2	96	70-133		50.0	46.4	93		3	20	
1,2,3-Trichloropropane	50.0	46.1	92	75-125		50.0	46.7	93		1	20	
1,2,3-Trimethylbenzene	50.0	48.4	97	70-130		50.0	47.3	95		2	20	
1,2,4-Trimethylbenzene	50.0	51.5	103	75-130		50.0	50.8	102		1	20	
1,3,5-Trimethylbenzene	50.0	51.0	102	75-130		50.0	49.6	99		3	20	
Vinyl Chloride	50.0	53.8	108	74-125		50.0	51.4	103		5	20	
m&p-Xylene	100	103	103	75-130		100	100	100		3	20	
o-Xylene	50.0	50.9	102	80-120		50.0	49.4	99		3	20	
4-Bromofluorobenzene(S)			105	80-120				104				
Dibromofluoromethane(S)			103	80-120				103				
1,2-Dichloroethane-d4(S)			99	80-120				97				
Toluene-d8(S)			101	80-120				102				

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order ID: A07873 Page: 5 of 5 Date: 04/12/22

Definitions/ Qualifiers:

- U: The analyte was not detected at or above the Reporting Limit (RL).
- *: Value reported is outside QC limits

Exception Summary:

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

Report Generated By:

By Sue Ricketts at 1:19 PM, Apr 12, 2022

RSN: VB22D11B-221020412131600



Analytical Laboratory

1914 Holloway Drive Holt, MI 48842 8660 S. Mackinaw Trail Cadillac, MI 49601 Phone: 231 775 8368

Phone: 517 699 0345 Fax: 517 699 0388 email: lab@fibertec.us

Fax: 231 775 8584

Geoprobe

11766 E. Grand River Rd. Brighton, MI 48116

Phone: 810 220 3300 Fax: 810 220 3311 Chain of Custody #

207003 PAGE ____ of ____

Client Nar	ne: Avco	idis							PARAM	TERS			Matrix Code Deliverables
Contact P	erson: Mo	urina S	Samp										S Soil GW Ground Water Level 2
TOW	me/Number	rd	30046730	CODE		200						PLE	A Air Sw Surface Water Level 3 O Oil ww Waste Water Level 4
Email distri	ibution list: Drina . 50	Squx Cinnis	arcadis.com s@arcadis.com	MATRIX (SEE RIGHT CORNER FOR CODE)	VERS	82603			14			HOLD SAMPLE	P Wipe X Other: Specify EDD
Quote#				EE RIGH	# OF CONTAINERS	П						Ĭ	
Purchase	Order# 3	00467	30.00012	RIX (S	8	400		1 1					
Date	Time	Sample #		MAT	0 #	3							Remarks:
4.8.2	1035		FIELPBLANK-040822	6W	3	3							
	1135		W-16D2_0406224	GW	-	3							
V			EQUIPMENT BLANK-040822	GW	3	3							
			TRIPBLANK		3	3							100
													Received By Lab
-													APR 0.8 2022
LEE.													0.1
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Comment	ts:		,										
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Sampled/	Relinquished Hocey	Hann	rola	Date	/ Tim	1e	1	240	Recei	ed By:	NX	1	itt
Relinquish	ed By:	1	#		e/ Tim			10	Recei	Ву:	/		
Relinquish	rons	XX	M	Date	A Time				- Fr	1		. 12	Shaper 4/8/22 4:3
Kelinquish	egey.	1	M	7/	3/	22	- 12	SAL	2	The t	aborton	in	
1	a hour	Tu	Unaround Time ALL-RESULTS WILL BE SENT BY THE END OF	THE B	UŚINE	ESS DA	AY			0	OV		LAB USE ONLY
1	bus. day	× 2	bus. days3 bus. days	_	4 }	bus, c	lays				Fiberte	ec pro	oject number: 7873
<u>, 5-7</u>	7 bus. days (st	andard)	Other (specify time/date requirement):					-			Temp	eratur	re upon receipt at Lab: 5. Yac ica
			Please	e see	e bo	ack	for t	erms c	and cor	nditio	ns		



Wednesday, April 20, 2022

Fibertec Project Number:

A08019

Project Identification:

TRW Milford (30046730) /30046730

Submittal Date:

04/18/2022

Mr. John McInnis Arcadis U.S., Inc. - Novi 28550 Cabot Drive Suite 500 Novi, MI 48377

Dear Mr. McInnis,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

By Sue Ricketts at 12:45 PM, Apr 20, 2022

For Daryl P. Strandbergh Laboratory Director

Enclosures

Page:



Order: A0 Date: 04

A08019 04/20/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: FIELD BLANK-041822 Chain of Custody: 207305

Client Project Name: TRW Milford (30046730) Sample No: Collect Date: 04/18/22

Client Project No: 30046730 Sample Matrix: Blank: Field Collect Time: 10:35

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/M	//S			Aliqu	uot ID:	A08019-001	Matrix:	Blank: Field		
Method: EPA 5030C/EPA 8260D				Desc	ription:	FIELD BLANK-04	41822			
						Prepa	ration	Ana	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U	L-	μg/L	50	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
3. Benzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
4. Bromobenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
5. Bromochloromethane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
6. Bromodichloromethane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
7. Bromoform	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
8. Bromomethane	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
9.2-Butanone	U		μg/L	25	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
10. n-Butylbenzene	U	V+	μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
11. sec-Butylbenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
12. tert-Butylbenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
13. Carbon Disulfide	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
15. Chlorobenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
16. Chloroethane	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
17. Chloroform	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
18. Chloromethane	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
19.2-Chlorotoluene	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
21. Dibromochloromethane	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
22. Dibromomethane	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
23.1,2-Dichlorobenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
25.1,4-Dichlorobenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
29.1,1-Dichloroethene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
35. Ethylbenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
36. Ethylene Dibromide	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
37. 2-Hexanone	U		μg/L	50	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order: A08019 Date: 04/20/22

A. Batch

Init

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: FIELD BLANK-041822 Chain of Custody: 207305

Client Project Name: TRW Milford (30046730) Sample No: Collect Date: 04/18/22

Client Project No: 30046730 Sample Matrix: Blank: Field Collect Time: 10:35

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Method: EPA 5030C/EPA 8260D					A08019-001 FIELD BLANK-04	Blank: Field		
					Prepara	ation	An	alysis
Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Ba
U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D
U		μg/L	50	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D
U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D
U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D
	Result U U U	Result Q U U U	Result Q Units U μg/L U μg/L U μg/L U μg/L	Result Q Units Reporting Limit U μg/L 5.0 U μg/L 50 U μg/L 5.0	Description: Result Q Units Reporting Limit Dilution U μg/L 5.0 1.0 U μg/L 50 1.0 U μg/L 5.0 1.0	Description: FIELD BLANK-04 Result Q Units Reporting Limit Dilution P. Date U μg/L 5.0 1.0 04/19/22 U μg/L 5.0 1.0 04/19/22 U μg/L 5.0 1.0 04/19/22	Description: FIELD BLANK-041822 Preparation Result Q Units Reporting Limit Dilution P. Date P. Batch U μg/L 5.0 1.0 04/19/22 VB22D19A U μg/L 5.0 1.0 04/19/22 VB22D19A U μg/L 5.0 1.0 04/19/22 VB22D19A	Description: FIELD BLANK-041822 Preparation An Result Q Units Reporting Limit Dilution P. Date P. Batch A. Date U μg/L 5.0 1.0 04/19/22 VB22D19A 04/19/22 13:08 U μg/L 5.0 1.0 04/19/22 VB22D19A 04/19/22 13:08 U μg/L 5.0 1.0 04/19/22 VB22D19A 04/19/22 13:08

3.0

1.0

μg/L

U

04/19/22

VB22D19A 04/19/22 13:08 VB22D19A BRC

‡ 62. Xylenes



Order: A08019 Date: 04/20/22

Matrix: Blank: Equipment

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: EQUIPMENT BLANK-041822 Chain of Custody: 207305

Client Project Name: TRW Milford (30046730) Sample No: Collect Date: 04/18/22

A08019-002

Aliquot ID:

Client Project No: 30046730 Sample Matrix: Blank: Equipment Collect Time: 11:20

Sample Comments:

Volatile Organic Compounds (VOCs) by GC/MS

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Method: EPA 5030C/EPA 8260D				Des	cription:	EQUIPMENT BLANK-04182	2		
						Preparation	Ar	nalysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date P. Batcl	A. Date	A. Batch	Init.
1. Acetone	U	L-	μg/L	50	1.0	04/19/22 VB22D19	A 04/19/22 13:35	VB22D19A	BRC
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	04/19/22 VB22D19	A 04/19/22 13:35	VB22D19A	BRC
3. Benzene	U		μg/L	1.0	1.0	04/19/22 VB22D19	A 04/19/22 13:35	VB22D19A	BRC
4. Bromobenzene	U		μg/L	1.0	1.0	04/19/22 VB22D19	A 04/19/22 13:35	VB22D19A	BRC
5. Bromochloromethane	U		μg/L	1.0	1.0	04/19/22 VB22D19	A 04/19/22 13:35	VB22D19A	BRC
6. Bromodichloromethane	U		μg/L	1.0	1.0	04/19/22 VB22D19	A 04/19/22 13:35	VB22D19A	BRC
7. Bromoform	U		μg/L	1.0	1.0	04/19/22 VB22D19	A 04/19/22 13:35	VB22D19A	BRC
8. Bromomethane	U		μg/L	5.0	1.0	04/19/22 VB22D19	A 04/19/22 13:35	VB22D19A	BRC
9.2-Butanone	U		μg/L	25	1.0	04/19/22 VB22D19	A 04/19/22 13:35	VB22D19A	BRC
10. n-Butylbenzene	U	V+	μg/L	1.0	1.0	04/19/22 VB22D19	A 04/19/22 13:35	VB22D19A	BRC
11. sec-Butylbenzene	U		μg/L	1.0	1.0	04/19/22 VB22D19	A 04/19/22 13:35	VB22D19A	BRC
12. tert-Butylbenzene	U		μg/L	1.0	1.0	04/19/22 VB22D19	A 04/19/22 13:35	VB22D19A	BRC
13. Carbon Disulfide	U		μg/L	5.0	1.0	04/19/22 VB22D19	A 04/19/22 13:35	VB22D19A	BRC
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	04/19/22 VB22D19	A 04/19/22 13:35	VB22D19A	BRC
15. Chlorobenzene	U		μg/L	1.0	1.0	04/19/22 VB22D19	A 04/19/22 13:35	VB22D19A	BRC
16. Chloroethane	U		μg/L	5.0	1.0	04/19/22 VB22D19	A 04/19/22 13:35	VB22D19A	BRC
17. Chloroform	U		μg/L	1.0	1.0	04/19/22 VB22D19	A 04/19/22 13:35	VB22D19A	BRC
18. Chloromethane	U		μg/L	5.0	1.0	04/19/22 VB22D19	A 04/19/22 13:35	VB22D19A	BRC
19.2-Chlorotoluene	U		μg/L	5.0	1.0	04/19/22 VB22D19	A 04/19/22 13:35	VB22D19A	BRC
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	04/19/22 VB22D19	A 04/19/22 13:35	VB22D19A	BRC
21. Dibromochloromethane	U		μg/L	5.0	1.0	04/19/22 VB22D19	A 04/19/22 13:35	VB22D19A	BRC
22. Dibromomethane	U		μg/L	5.0	1.0	04/19/22 VB22D19	A 04/19/22 13:35	VB22D19A	BRC
23.1,2-Dichlorobenzene	U		μg/L	1.0	1.0	04/19/22 VB22D19	A 04/19/22 13:35	VB22D19A	BRC
24.1,3-Dichlorobenzene	U		μg/L	1.0	1.0	04/19/22 VB22D19	A 04/19/22 13:35	VB22D19A	BRC
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	04/19/22 VB22D19	A 04/19/22 13:35	VB22D19A	BRC
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	04/19/22 VB22D19	A 04/19/22 13:35	VB22D19A	BRC
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	04/19/22 VB22D19	A 04/19/22 13:35	VB22D19A	BRC
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	04/19/22 VB22D19	A 04/19/22 13:35	VB22D19A	BRC
29.1,1-Dichloroethene	U		μg/L	1.0	1.0	04/19/22 VB22D19	A 04/19/22 13:35	VB22D19A	BRC
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	04/19/22 VB22D19	A 04/19/22 13:35	VB22D19A	BRC
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	04/19/22 VB22D19	A 04/19/22 13:35	VB22D19A	BRC
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	04/19/22 VB22D19	A 04/19/22 13:35	VB22D19A	BRC
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	04/19/22 VB22D19	A 04/19/22 13:35	VB22D19A	BRC
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	04/19/22 VB22D19	A 04/19/22 13:35	VB22D19A	BRC
35. Ethylbenzene	U		μg/L	1.0	1.0	04/19/22 VB22D19	A 04/19/22 13:35	VB22D19A	BRC
36. Ethylene Dibromide	U		μg/L	1.0	1.0	04/19/22 VB22D19	A 04/19/22 13:35	VB22D19A	BRC

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601

μg/L

U

T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368

1.0

04/19/22

F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584

VB22D19A 04/19/22 13:35 VB22D19A BRC

37.2-Hexanone



Order: A08019 Date: 04/20/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: EQUIPMENT BLANK-041822 Chain of Custody: 207305

Client Project Name: TRW Milford (30046730) Sample No: Collect Date: 04/18/22

Client Project No: 30046730 Sample Matrix: Blank: Equipment Collect Time: 11:20

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by C	GC/MS			Aliq	uot ID:	A08019-002	Matrix:	Blank: Equipme	nt	
Method: EPA 5030C/EPA 8260D				Des	cription:	EQUIPMENT BLA	ANK-041822			
						Prepar	ation	An	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
38. Isopropylbenzene	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC
39.4-Methyl-2-pentanone	U		μg/L	50	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC
40. Methylene Chloride	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC
‡ 41.2-Methylnaphthalene	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC
42.MTBE	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC
43. Naphthalene	U	V+ L+	μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC
44. n-Propylbenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC
45. Styrene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC
46.1,1,1,2-Tetrachloroethane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC
47.1,1,2,2-Tetrachloroethane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC
48. Tetrachloroethene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC
49. Toluene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC
50.1,2,4-Trichlorobenzene	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC
51.1,1,1-Trichloroethane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC
‡ 52.1,1,2-Trichloroethane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC
53. Trichloroethene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC
54. Trichlorofluoromethane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC
55.1,2,3-Trichloropropane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC
‡ 56.1,2,3-Trimethylbenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC
57.1,2,4-Trimethylbenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC
58.1,3,5-Trimethylbenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC
59. Vinyl Chloride	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC
60. m&p-Xylene	U		μg/L	2.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC
61. o-Xylene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC
‡ 62. Xylenes	U		μg/L	3.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC



Order: A08019 Date: 04/20/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2-041822 Chain of Custody: 207305

Client Project Name: TRW Milford (30046730) Sample No: Collect Date: 04/18/22

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 10:55

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/M	MS			Aliq	uot ID:	A08019-003	Matrix: (Ground Water		
Method: EPA 5030C/EPA 8260D				Des	cription:	OW-16D2-041822				
						Prepara	ation	An	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U	L-	μg/L	50	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
3. Benzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
4. Bromobenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
5. Bromochloromethane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
6. Bromodichloromethane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
7. Bromoform	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
8. Bromomethane	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
9.2-Butanone	U		μg/L	25	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
10. n-Butylbenzene	U	V+	μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
11. sec-Butylbenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
12. tert-Butylbenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
13. Carbon Disulfide	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
15. Chlorobenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
16. Chloroethane	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
17. Chloroform	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
18. Chloromethane	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
19.2-Chlorotoluene	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
21. Dibromochloromethane	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
22. Dibromomethane	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
23.1,2-Dichlorobenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
27.1,1-Dichloroethane	3.0		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
29.1,1-Dichloroethene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
30. cis-1,2-Dichloroethene	18		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
31. trans-1,2-Dichloroethene	1.3		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
35. Ethylbenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
36. Ethylene Dibromide	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
37.2-Hexanone	U		μg/L	50	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC

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Order: A08019 Date: 04/20/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2-041822 Chain of Custody: 207305

Client Project Name: TRW Milford (30046730) Sample No: Collect Date: 04/18/22

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 10:55

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by	GC/MS			Aliq	uot ID:	A08019-003	Matrix:	Ground Water		
Method: EPA 5030C/EPA 8260D				Des	cription:	OW-16D2-041822				
						Prepara	ation	Ana	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
38. Isopropylbenzene	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
39.4-Methyl-2-pentanone	U		μg/L	50	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
40. Methylene Chloride	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
‡ 41.2-Methylnaphthalene	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
42.MTBE	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
43. Naphthalene	U	V+ L+	μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
44. n-Propylbenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
45. Styrene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
46.1,1,1,2-Tetrachloroethane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
47.1,1,2,2-Tetrachloroethane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
48. Tetrachloroethene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
49. Toluene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
50.1,2,4-Trichlorobenzene	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
51.1,1,1-Trichloroethane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
‡ 52.1,1,2-Trichloroethane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
53. Trichloroethene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
54. Trichlorofluoromethane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
55.1,2,3-Trichloropropane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
‡ 56.1,2,3-Trimethylbenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
57.1,2,4-Trimethylbenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
58.1,3,5-Trimethylbenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
59. Vinyl Chloride	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
60. m&p-Xylene	U		μg/L	2.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
61.o-Xylene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
‡ 62. Xylenes	U		μg/L	3.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC



Analytical Laboratory Report Laboratory Project Number: A08019

Order: A08019 Date: 04/20/22

Definitions/ Qualifiers:

- A: Spike recovery or precision unusable due to dilution.
- B: The analyte was detected in the associated method blank.
- E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
- J: The concentration is an estimated value.
- M: Modified Method
- U: The analyte was not detected at or above the reporting limit.
- X: Matrix Interference has resulted in a raised reporting limit or distorted result.
- W: Results reported on a wet-weight basis.
- *: Value reported is outside QC limits

Exception Summary:

L- : Recovery in the associated laboratory sample (LCS) exceeds the lower control limit. Results may be biased low.
 L+ : Recovery in the associated laboratory sample (LCS) exceeds the upper control limit. Results may be biased high.
 V+ : Recovery in the associated continuing calibration verification sample (CCV) exceeds the upper control limit. Results may be biased high.

Analysis Locations:

All analyses performed in Holt.



Accreditation Number(s):

T104704518-19-8 (TX)



Order ID: A08019 Page: 1 of 5 Date: 04/20/22

VB22D19A: Method Blank (MB)

Run Time: VB22D19A.MB 04/19/2022 11		
	MB Result	MB MB RDL
		Qualifier
Analyte	μg/L	μg/L
Acetone	U	50
Acrylonitrile	U	2.0
Benzene	U	1.0
Bromobenzene	U	1.0
Bromochloromethane	U	1.0
Bromodichloromethane	U	1.0
Bromoform	U	1.0
Bromomethane	U	5.0
2-Butanone	U	25
n-Butylbenzene	U	1.0
sec-Butylbenzene	U	1.0
tert-Butylbenzene	U	1.0
Carbon Disulfide	U	5.0
Carbon Tetrachloride	U	1.0
Chlorobenzene	U	1.0
Chloroethane	U	5.0
Chloroform	U	1.0
Chloromethane	U	5.0
2-Chlorotoluene	U	5.0
1,2-Dibromo-3-chloropropane (SIM)	U	1.0
Dibromochloromethane	U	5.0
Dibromomethane	U	5.0
1,2-Dichlorobenzene	U	1.0
1,3-Dichlorobenzene	U	1.0
1,4-Dichlorobenzene	U	1.0
Dichlorodifluoromethane	U	5.0
1,1-Dichloroethane	U	1.0
1,2-Dichloroethane	U	1.0
1,1-Dichloroethene	U	1.0
cis-1,2-Dichloroethene	U	1.0
trans-1,2-Dichloroethene	U	1.0
1,2-Dichloropropane	U	1.0
cis-1,3-Dichloropropene	U	0.50
	1914 Holloway Drive	Holt, MI 48842

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F: (810) 220-3311

F: (231) 775-8584

Brighton, MI 48116

Cadillac, MI 49601

11766 E. Grand River

8660 S. Mackinaw Trail



Order ID: A08019 Page: 2 of 5 Date: 04/20/22

VB22D19A: Method Blank (MB)

Run Time: VB22D19A.MB 04/19/2022 11:47 [V	/B22D19A]		
	MB Result	MB	MB RDL
		Qualifier	
Analyte	μg/L		μg/L
trans-1,3-Dichloropropene	U		0.50
Ethylbenzene	U		1.0
Ethylene Dibromide	U		1.0
2-Hexanone	U		50
Isopropylbenzene	U		5.0
4-Methyl-2-pentanone	U		50
Methylene Chloride	U		5.0
2-Methylnaphthalene	U		5.0
MTBE	U		5.0
Naphthalene	U		5.0
n-Propylbenzene	U		1.0
Styrene	U		1.0
1,1,2-Tetrachloroethane	U		1.0
1,1,2,2-Tetrachloroethane	U		1.0
Tetrachloroethene	U		1.0
Toluene	U		1.0
1,2,4-Trichlorobenzene	U		5.0
1,1,1-Trichloroethane	U		1.0
1,1,2-Trichloroethane	U		1.0
Trichloroethene	U		1.0
Trichlorofluoromethane	U		1.0
1,2,3-Trichloropropane	U		1.0
1,2,3-Trientoopropane	U		1.0
1,2,4-Trimethylbenzene	U		1.0
1,3,5-Trimethylbenzene	U		1.0
Vinyl Chloride	U		1.0
m&p-Xylene	U		2.0
o-Xylene	U		1.0
4-Bromofluorobenzene(S)	99		80-120
Dibromofluoromethane(S)	101		80-120
	100		80-120
1,2-Dichloroethane-d4(S) Toluene-d8(S)	100 100		80-120

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Order ID: A08019 Page: 3 of 5 Date: 04/20/22

VB22D19A: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VB22D19A.LCS: 04/19/2022 10:27 [VB22D19A] VB22D19A.LCSD: 04/19/2022 10:54 [VB22D19A]													
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD	
	Spike Am	ount			Qualifier	Spike Amo		Rec.	Qualifier			Qualifier	
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%		
Acetone	50.0	23.4	47	54-140	*	50.0	22.4	45	*	4	20		
Acrylonitrile	50.0	55.1	110	70-130		50.0	56.3	113		3	20		
Benzene	50.0	49.1	98	80-120		50.0	48.2	96		2	20		
Bromobenzene	50.0	50.2	100	75-125		50.0	49.3	99		1	20		
Bromochloromethane	50.0	49.3	99	70-130		50.0	48.7	97		2	20		
Bromodichloromethane	50.0	52.1	104	75-120		50.0	51.3	103		1	20		
Bromoform	50.0	51.1	102	70-130		50.0	51.8	104		2	20		
Bromomethane	50.0	49.3	99	68-135		50.0	47.9	96		3	20		
2-Butanone	50.0	38.2	76	70-148		50.0	39.1	78		3	20		
n-Butylbenzene	50.0	61.4	123	70-133		50.0	57.7	115		7	20		
sec-Butylbenzene	50.0	55.3	111	70-125		50.0	52.8	106		5	20		
tert-Butylbenzene	50.0	54.6	109	70-130		50.0	52.6	105		4	20		
Carbon Disulfide	50.0	43.7	87	70-130		50.0	41.9	84		4	20		
Carbon Tetrachloride	50.0	48.0	96	70-130		50.0	48.2	96		0	20		
Chlorobenzene	50.0	50.5	101	80-120		50.0	49.7	99		2	20		
Chloroethane	50.0	45.4	91	61-130		50.0	44.0	88		3	20		
Chloroform	50.0	48.1	96	80-120		50.0	48.5	97		1	20		
Chloromethane	50.0	51.3	103	67-125		50.0	50.2	100		3	20		
2-Chlorotoluene	50.0	53.2	106	75-125		50.0	51.3	103		3	20		
1,2-Dibromo-3-chloropropane (SIM)	50.0	56.4	113	70-130		50.0	56.9	114		1	20		
Dibromochloromethane	50.0	51.4	103	70-130		50.0	51.9	104		1	20		
Dibromomethane	50.0	49.7	99	75-125		50.0	50.3	101		2	20		
1,2-Dichlorobenzene	50.0	53.0	106	70-120		50.0	51.4	103		3	20		
1,3-Dichlorobenzene	50.0	52.6	105	75-125		50.0	51.4	103		2	20		
1,4-Dichlorobenzene	50.0	49.3	99	75-125		50.0	48.1	96		3	20		
Dichlorodifluoromethane	50.0	54.0	108	70-136		50.0	52.4	105		3	20		
1,1-Dichloroethane	50.0	49.9	100	70-130		50.0	49.2	98		2	20		
1,2-Dichloroethane	50.0	47.3	95	70-130		50.0	47.5	95		0	20		
1,1-Dichloroethene	50.0	45.2	90	78-120		50.0	43.5	87		3	20		
cis-1,2-Dichloroethene	50.0	50.3	101	70-125		50.0	50.2	100		1	20		
trans-1,2-Dichloroethene	50.0	48.2	96	70-130		50.0	47.2	94		2	20		
1,2-Dichloropropane	50.0	52.5	105	80-121		50.0	52.1	104		1	20		
cis-1,3-Dichloropropene	50.0	54.6	109	70-130		50.0	53.9	108		1	20		
	101411 11 11		11 1: 141 400					F (547) 600 020					

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order ID: A08019 Page: 4 of 5 Date: 04/20/22

VB22D19A: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VB22D19A.LCS: 04/19/2022 10):27 [VB22D19A] VB22	D19A.LCSD: 04/19	/2022 10:54 [V	B22D19A]								
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Am	ount			Qualifier	Spike Amoun	t Result	Rec.	Qualifier			Qualifier
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
trans-1,3-Dichloropropene	50.0	58.3	117	70-132		50.0	57.7	115		2	20	
Ethylbenzene	50.0	52.2	104	80-120		50.0	51.0	102		2	20	
Ethylene Dibromide	50.0	53.9	108	80-120		50.0	54.1	108		0	20	
2-Hexanone	50.0	39.6	79	70-130		50.0	39.0	78		1	20	
Isopropylbenzene	50.0	54.4	109	75-125		50.0	53.3	107		2	20	
4-Methyl-2-pentanone	50.0	57.3	115	70-130		50.0	58.2	116		1	20	
Methylene Chloride	50.0	42.2	84	70-130		50.0	35.1	70		18	20	
2-Methylnaphthalene	50.0	62.1	124	70-130		50.0	58.1	116		7	20	
MTBE	50.0	52.6	105	70-125		50.0	53.6	107		2	20	
Naphthalene	50.0	68.2	136	70-130	*	50.0	66.9	134	*	1	20	
n-Propylbenzene	50.0	53.9	108	70-130		50.0	52.0	104		4	20	
Styrene	50.0	49.5	99	70-130		50.0	49.1	98		1	20	
1,1,1,2-Tetrachloroethane	50.0	52.6	105	80-130		50.0	52.2	104		1	20	
1,1,2,2-Tetrachloroethane	50.0	61.9	124	70-130		50.0	62.5	125		1	20	
Tetrachloroethene	50.0	50.6	101	70-130		50.0	49.4	99		2	20	
Toluene	50.0	50.2	100	80-120		50.0	49.2	98		2	20	
1,2,4-Trichlorobenzene	50.0	59.2	118	70-130		50.0	57.8	116		2	20	
1,1,1-Trichloroethane	50.0	50.4	101	70-130		50.0	49.4	99		2	20	
1,1,2-Trichloroethane	50.0	52.4	105	75-125		50.0	52.3	105		0	20	
Trichloroethene	50.0	45.6	91	71-125		50.0	44.8	90		1	20	
Trichlorofluoromethane	50.0	51.7	103	70-133		50.0	48.8	98		5	20	
1,2,3-Trichloropropane	50.0	53.5	107	75-125		50.0	53.4	107		0	20	
1,2,3-Trimethylbenzene	50.0	53.1	106	70-130		50.0	51.7	103		3	20	
1,2,4-Trimethylbenzene	50.0	58.0	116	75-130		50.0	56.0	112		4	20	
1,3,5-Trimethylbenzene	50.0	55.3	111	75-130		50.0	53.5	107		4	20	
Vinyl Chloride	50.0	51.3	103	74-125		50.0	49.3	99		4	20	
m&p-Xylene	100	107	107	75-130		100	104	104		3	20	
o-Xylene	50.0	53.6	107	80-120		50.0	52.9	106		1	20	
4-Bromofluorobenzene(S)			100	80-120				101				
Dibromofluoromethane(S)			99	80-120				100				
1,2-Dichloroethane-d4(S)			104	80-120				104				
Toluene-d8(S)			100	80-120				100				

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order ID: A08019 Page: 5 of 5 Date: 04/20/22

Definitions/ Qualifiers:

- U: The analyte was not detected at or above the Reporting Limit (RL).
- *: Value reported is outside QC limits

Exception Summary:

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

Report Generated By:

By Sue Ricketts at 12:52 PM, Apr 20, 2022

RSN: VB22D19A-221100420124953

FiberteC environmental services

Analytical Laboratory

1914 Holloway Drive Holt, MI 48842

Phone: 517 699 0345 Fax: 517 699 0388

email: lab@fibertec.us

loway Drive 8660 S. Mackinaw Trail

Cadillac, MI 49601 Phone: 231 775 8368

Fax: 231 775 8584

Geoprobe

11766 E. Grand River Rd.

Brighton, MI 48116 Phone: 810 220 3300 Fax: 810 220 3311 Chain of Custody # 207305
PAGE ___ of ___

Client Name: AVCACAS PARAMETERS Matrix Code Deliverables Contact Person: Stacy Hannula GW Ground Water Level 2 Project Name/ Number: 300H67310 sw Surface Water Level 3 ww Waste Water Level 4 O Oil HOLD SAMPLE Email distribution list: warina. sampo arcadis, com EDD X Other: Specify # OF CONTAINERS john mainnis @ arcadis. com Quote# 200 30046730.00012 Purchase Order# Sample # Client Sample Descriptor Remarks: Time 6W 3 3 FIELDBLANK 641822 EQUIPMENTBLANK-041822 6W 3 1120 sample time 6W 3 3 OW-16D2-641822 E TRIPBLANK Comments: 144.18.22 12:10 LAB USE ONLY Fibertec project number: A08019 3 bus, days 4 bus, days 1 bus, day Temperature upon receipt at Lab: 31 °C Other (specify time/date requirement): _ _5-7 bus, days (standard) Please see back for terms and conditions

Arcadis of Michigan, LLC

28550 Cabot Drive

Suite 500

Novi, Michigan 48377

Tel 248 994 2240

www.arcadis.com

Attachment 10

Electronic Mail Confirmation from Mr. Wojciechowski on May 26, 2022

McInnis, John

From: Wojciechowski, Kevin (EGLE) < WojciechowskiK@michigan.gov>

Sent: Thursday, May 26, 2022 5:46 PM

To: McInnis, John

Cc: Detwiler Scott MSA HEEN; Owens, Paul (EGLE); Wilson, Cheryl (EGLE); Yusko-Kotimko,

Tiffany (EGLE)

Subject: RE: VAP Monitoring well screen location

Thanks for the update.

Keyin Wojciechowski

Senior Environmental Quality Analyst Michigan Department of Environment, Great Lakes, and Energy Remediation Redevelopment Division

Warren District Office Cell: 586-623-2948

wojciechowskik@michigan.gov

Pollution Emergency Alerting System: 1-800-292-4706

From: McInnis, John < John.McInnis@arcadis.com>

Sent: Thursday, May 26, 2022 3:58 PM

To: Wojciechowski, Kevin (EGLE) < WojciechowskiK@michigan.gov>

Cc: Detwiler Scott MSA HEEN <scott.detwiler@zf.com>; Owens, Paul (EGLE) <OWENSP@michigan.gov>; Wilson, Cheryl

(EGLE) <WILSONC3@michigan.gov>; Yusko-Kotimko, Tiffany (EGLE) <YuskoKotimkoT@michigan.gov>

Subject: RE: VAP Monitoring well screen location

CAUTION: This is an External email. Please send suspicious emails to abuse@michigan.gov

Hi Kevin,

As a follow-up to your email and our calls, this serves as confirmation that we are proceeding with the installation of a new monitoring well at the VAP #1 location today and tomorrow with a screened interval of 85 to 90 feet below ground level.

It's our intent to also install another deeper well near VAP #1 and OW16D2 with a screened interval of 95 to 100 feet below ground level consistent with the OW-16D2 screen interval, to serve as a nested pair with the new 85 to 90 foot well once the driller's schedule can be confirmed and additional materials procured.

Please let me know if you have any questions or concerns.

Thanks, John

From: Wojciechowski, Kevin (EGLE) < WojciechowskiK@michigan.gov >

Sent: Thursday, May 26, 2022 10:54 AM

To: McInnis, John < John. McInnis@arcadis.com >

Cc: Detwiler Scott MSA HEEN <scott.detwiler@zf.com>; Owens, Paul (EGLE) <owensp@michigan.gov>; Wilson, Cheryl

(EGLE) < WILSONC3@michigan.gov>; Yusko-Kotimko, Tiffany (EGLE) < Yusko-KotimkoT@michigan.gov>

Subject: Re: VAP Monitoring well screen location

Yes that was considered and it wasn't ruled out. Looking back at EGLEs communications with ZF, total VOCs was agree upon to set the screen. This is outside of the Order, but EGLE believes this is an important monitoring point and the VAP demonstrated VOCs especially CVOCs equally spread out in a large portion of the aquifer. The only thing that was agreed to in correspondences is set at highest total VOCs.

From: McInnis, John < John. McInnis@arcadis.com>

Sent: Thursday, May 26, 2022 10:00:38 AM

To: Wojciechowski, Kevin (EGLE) < WojciechowskiK@michigan.gov>

Cc: Detwiler Scott MSA HEEN <scott.detwiler@zf.com>; Owens, Paul (EGLE) <OWENSP@michigan.gov>; Wilson, Cheryl

(EGLE) <WILSONC3@michigan.gov>; Yusko-Kotimko, Tiffany (EGLE) <YuskoKotimkoT@michigan.gov>

Subject: RE: VAP Monitoring well screen location

CAUTION: This is an External email. Please send suspicious emails to abuse@michigan.gov

Hi Kevin,

Thanks for the feedback. Was there a consideration to use a 10-foot screen to cover a greater area of the impacted zone?

Also, just to confirm, you are only concerned about the total chlorinated VOCs for evaluation of the screen placement correct?

John

John McInnis PE

Principal Engineer/Project Manager Arcadis of Michigan, LLC 28550 Cabot Drive Suite 500 | Novi, MI | 48377 | USA T +1 248 994 2285 M +1 248 982 9674 www.arcadis.com











Professional Registration / PE-MI, 6201037207

From: Wojciechowski, Kevin (EGLE) < WojciechowskiK@michigan.gov>

Sent: Thursday, May 26, 2022 9:48 AM

To: McInnis, John < John. McInnis@arcadis.com >

Cc: Detwiler Scott MSA HEEN <scott.detwiler@zf.com>; Owens, Paul (EGLE) <owensp@michigan.gov>; Wilson, Cheryl

(EGLE) <WILSONC3@michigan.gov>; Yusko-Kotimko, Tiffany (EGLE) <YuskoKotimkoT@michigan.gov>

Subject: VAP Monitoring well screen location

John,

After discussions with my supervisor's and geologist. The screen of the monitoring well should be placed from 85-90 ft where the highest total VOCs were located. Based on the review of the VAP data and the location of the monitoring well being a sentinel well before the village intake wells, levels of VOCs are consistent from 75-110 ft. Nested well screens should be considered for this location, to better monitoring near the Village intake wells.

Thanks,

Kevin Wojciechowski

Senior Environmental Quality Analyst
Michigan Department of Environment, Great Lakes, and Energy
Remediation Redevelopment Division
Warren District Office

Cell: 586-623-2948

wojciechowskik@michigan.gov

Pollution Emergency Alerting System: 1-800-292-4706

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Attachment 11

Laboratory Analytical Reports – OW-16D2 since Redevelopment Revised – Added Lab Reports

ANALYTICAL REPORT

Eurofins Canton 180 S. Van Buren Avenue Barberton, OH 44203 Tel: (330)497-9396

Laboratory Job ID: 240-164584-1

Client Project/Site: Milford

For:

ZF Active Safety and Electronics LLC Tech 2 12025 Tech Center Drive Livonia, Michigan 48150

Attn: Scott Detwiler

Ade Del Your

Authorized for release by: 4/13/2022 2:44:35 PM

Michael DelMonico, Project Manager I (330)497-9396

Michael.DelMonico@et.eurofinsus.com

LINKS

Review your project results through Total Access

Have a Question?



Visit us at:

www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ZF Active Safety and Electronics LLC

Job ID: 240-164584-1 Project/Site: Milford

Qualifiers

GC/MS VOA

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.

Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery **CFL** Contains Free Liquid CFU Colony Forming Unit CNF Contains No Free Liquid

Duplicate Error Ratio (normalized absolute difference) **DER**

Dil Fac **Dilution Factor**

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

Estimated Detection Limit (Dioxin) **EDL** LOD Limit of Detection (DoD/DOE) LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level" MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit MLMinimum Level (Dioxin) MPN Most Probable Number Method Quantitation Limit MQL

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive QC **Quality Control**

Relative Error Ratio (Radiochemistry) **RER**

Reporting Limit or Requested Limit (Radiochemistry) RL

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin) **TEQ** Toxicity Equivalent Quotient (Dioxin)

Too Numerous To Count **TNTC**

Eurofins Canton

Case Narrative

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Job ID: 240-164584-1

Job ID: 240-164584-1

Laboratory: Eurofins Canton

Narrative

ob Narrative 240-164584-1

Comments

No additional comments.

Receipt

The samples were received on 4/6/2022 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.9° C.

GC/MS VOA

Method 8260B: The continuing calibration verification (CCV) associated with batch 240-522044 recovered above the upper control limit for Acetone. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported. The associated samples are impacted: OW-16D2_040422 (240-164584-1), EQUIPMENT BLANK_040422 (240-164584-2), FIELD BLANK_040422 (240-164584-3), TRIP BLANK (240-164584-4), (CCV 240-522044/4), (CCVIS 240-522044/3), (LCS 240-522044/5), (LCS 240-522044/6), (MB 240-522044/9), (240-164634-B-3), (240-164634-B-3 MS) and (240-164634-B-3 MSD).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep

No additional analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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Method Summary

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Job ID: 240-164584-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
5030B	Purge and Trap	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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Sample Summary

Client: ZF Active Safety and Electronics LLC

FIELD BLANK_040422

TRIP BLANK

Project/Site: Milford

240-164584-3

240-164584-4

 Lab Sample ID
 Client Sample ID
 Matrix
 Collected
 Received

 240-164584-1
 OW-16D2_040422
 Water
 04/04/22 11:55
 04/06/22 08:00

 240-164584-2
 EQUIPMENT BLANK_040422
 Water
 04/04/22 12:10
 04/06/22 08:00

Water

Water

04/04/22 11:45 04/06/22 08:00

04/04/22 00:00 04/06/22 08:00

1

Job ID: 240-164584-1

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Detection Summary

Client: ZF Active Safety and Electronics LLC Job ID: 240-164584-1

Project/Site: Milford

Client Sample ID: OW-16D2_040422	Lab Sample ID: 240-164584-1

Analyte	Result Qualifier	RL	Unit	Dil Fac I	Method	Prep Type
1,1-Dichloroethane	3.8	1.0	ug/L		8260B	Total/NA
cis-1,2-Dichloroethene	21	1.0	ug/L	1	8260B	Total/NA
trans-1,2-Dichloroethene	1.7	1.0	ug/L	1	8260B	Total/NA

No Detections.

Client Sample ID: FIELD BLANK_040422 Lab Sample ID: 240-164584-3

No Detections.

Client Sample ID: TRIP BLANK Lab Sample ID: 240-164584-4

No Detections.

Job ID: 240-164584-1 Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

4-Bromofluorobenzene (Surr)

Toluene-d8 (Surr)

Client Sample ID: OW-16D2_040422

Lab Sample ID: 240-164584-1 Date Collected: 04/04/22 11:55

Matrix: Water

Date Received: 04/06/22 08:00

Analyte	Result	Qualifier	RL	Unit	D Prepared	Analyzed	Dil Fa
Acetone	10	U	10	ug/L		04/07/22 17:02	
Benzene	1.0	U	1.0	ug/L		04/07/22 17:02	
Bromodichloromethane	1.0	U	1.0	ug/L		04/07/22 17:02	
Bromoform	1.0	U	1.0	ug/L		04/07/22 17:02	
Bromomethane	1.0	U	1.0	ug/L		04/07/22 17:02	
2-Butanone (MEK)	10	U	10	ug/L		04/07/22 17:02	
Carbon disulfide	1.0	Ü	1.0	ug/L		04/07/22 17:02	
Carbon tetrachloride	1.0		1.0	ug/L		04/07/22 17:02	
Chlorobenzene	1.0		1.0	ug/L		04/07/22 17:02	
Chloroethane	1.0		1.0	ug/L		04/07/22 17:02	
Chloroform	1.0		1.0	ug/L		04/07/22 17:02	
Chloromethane	1.0		1.0	ug/L		04/07/22 17:02	
			1.0			04/07/22 17:02	
1,1-Dichloroethane 1,2-Dichloroethane	3.8 1.0	11	1.0	ug/L		04/07/22 17:02	
,	1.0		1.0	ug/L		04/07/22 17:02	
1,1-Dichloroethene				ug/L			
1,2-Dichloropropane	1.0		1.0	ug/L		04/07/22 17:02	
cis-1,3-Dichloropropene	1.0		1.0	ug/L		04/07/22 17:02	
trans-1,3-Dichloropropene	1.0		1.0	ug/L		04/07/22 17:02	
Ethylbenzene	1.0		1.0	ug/L		04/07/22 17:02	
2-Hexanone	10		10	ug/L		04/07/22 17:02	
Methylene Chloride	5.0		5.0	ug/L		04/07/22 17:02	
4-Methyl-2-pentanone (MIBK)	10		10	ug/L		04/07/22 17:02	
Styrene	1.0	U	1.0	ug/L		04/07/22 17:02	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	ug/L		04/07/22 17:02	
Tetrachloroethene	1.0	U	1.0	ug/L		04/07/22 17:02	
Toluene	1.0	U	1.0	ug/L		04/07/22 17:02	
Trichloroethene	1.0	U	1.0	ug/L		04/07/22 17:02	
Vinyl chloride	1.0	U	1.0	ug/L		04/07/22 17:02	
Xylenes, Total	2.0	U	2.0	ug/L		04/07/22 17:02	
1,1,1-Trichloroethane	1.0	U	1.0	ug/L		04/07/22 17:02	
1,1,2-Trichloroethane	1.0	U	1.0	ug/L		04/07/22 17:02	
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	ug/L		04/07/22 17:02	
1,2-Dibromoethane	1.0	U	1.0	ug/L		04/07/22 17:02	
Dichlorodifluoromethane	1.0	U	1.0	ug/L		04/07/22 17:02	
cis-1,2-Dichloroethene	21		1.0	ug/L		04/07/22 17:02	
trans-1,2-Dichloroethene	1.7		1.0	ug/L		04/07/22 17:02	
Isopropylbenzene	1.0		1.0	ug/L		04/07/22 17:02	
Methyl tert-butyl ether	1.0		1.0	ug/L		04/07/22 17:02	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0		1.0	ug/L		04/07/22 17:02	
1,2,4-Trichlorobenzene	1.0		1.0			04/07/22 17:02	
1,2-Dichlorobenzene				ug/L			
	1.0		1.0	ug/L		04/07/22 17:02	
1,3-Dichlorobenzene	1.0		1.0	ug/L		04/07/22 17:02	
1,4-Dichlorobenzene	1.0		1.0	ug/L		04/07/22 17:02	
Trichlorofluoromethane	1.0		1.0	ug/L		04/07/22 17:02	
Dibromochloromethane	1.0	U	1.0	ug/L		04/07/22 17:02	
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4 (Surr)	105		62 - 137			04/07/22 17:02	

Eurofins Canton

4/13/2022

04/07/22 17:02

04/07/22 17:02

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85

Client: ZF Active Safety and Electronics LLC Job ID: 240-164584-1

Project/Site: Milford

Date Received: 04/06/22 08:00

Client Sample ID: OW-16D2_040422 Lab Sample ID: 240-164584-1

Date Collected: 04/04/22 11:55 **Matrix: Water**

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

%Recovery Qualifier Limits Prepared Analyzed Dil Fac Dibromofluoromethane (Surr) 93 73 - 120 04/07/22 17:02

Client: ZF Active Safety and Electronics LLC Job ID: 240-164584-1

Project/Site: Milford

Toluene-d8 (Surr)

Client Sample ID: EQUIPMENT BLANK_040422

Date Collected: 04/04/22 12:10 Date Received: 04/06/22 08:00 Lab Sample ID: 240-164584-2

Matrix: Water

Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	ug/L			04/07/22 15:21	1
Benzene	1.0	U	1.0	ug/L			04/07/22 15:21	1
Bromodichloromethane	1.0	U	1.0	ug/L			04/07/22 15:21	1
Bromoform	1.0	U	1.0	ug/L			04/07/22 15:21	1
Bromomethane	1.0	U	1.0	ug/L			04/07/22 15:21	1
2-Butanone (MEK)	10	U	10	ug/L			04/07/22 15:21	1
Carbon disulfide	1.0	U	1.0	ug/L			04/07/22 15:21	1
Carbon tetrachloride	1.0	U	1.0	ug/L			04/07/22 15:21	1
Chlorobenzene	1.0	U	1.0	ug/L			04/07/22 15:21	1
Chloroethane	1.0	U	1.0	ug/L			04/07/22 15:21	1
Chloroform	1.0	U	1.0	ug/L			04/07/22 15:21	1
Chloromethane	1.0	U	1.0	ug/L			04/07/22 15:21	1
1,1-Dichloroethane	1.0	U	1.0	ug/L			04/07/22 15:21	1
1,2-Dichloroethane	1.0	U	1.0	ug/L			04/07/22 15:21	1
1,1-Dichloroethene	1.0	U	1.0	ug/L			04/07/22 15:21	1
1,2-Dichloropropane	1.0	U	1.0	ug/L			04/07/22 15:21	1
cis-1,3-Dichloropropene	1.0	U	1.0	ug/L			04/07/22 15:21	1
trans-1,3-Dichloropropene	1.0	U	1.0	ug/L			04/07/22 15:21	1
Ethylbenzene	1.0		1.0	ug/L			04/07/22 15:21	1
2-Hexanone	10	U	10	ug/L			04/07/22 15:21	1
Methylene Chloride	5.0	U	5.0	ug/L			04/07/22 15:21	1
4-Methyl-2-pentanone (MIBK)	10		10	ug/L			04/07/22 15:21	1
Styrene	1.0		1.0	ug/L			04/07/22 15:21	1
1,1,2,2-Tetrachloroethane	1.0		1.0	ug/L			04/07/22 15:21	1
Tetrachloroethene	1.0		1.0	ug/L			04/07/22 15:21	1
Toluene	1.0		1.0	ug/L			04/07/22 15:21	1
Trichloroethene	1.0		1.0	ug/L			04/07/22 15:21	1
Vinyl chloride	1.0		1.0	ug/L			04/07/22 15:21	
Xylenes, Total	2.0		2.0	ug/L			04/07/22 15:21	1
1,1,1-Trichloroethane	1.0		1.0	ug/L			04/07/22 15:21	1
1,1,2-Trichloroethane	1.0		1.0	ug/L			04/07/22 15:21	· · · · · · · 1
1,2-Dibromo-3-Chloropropane	2.0		2.0	ug/L			04/07/22 15:21	1
1,2-Dibromoethane	1.0		1.0	ug/L			04/07/22 15:21	1
Dichlorodifluoromethane	1.0		1.0	ug/L			04/07/22 15:21	· · · · · · · 1
cis-1,2-Dichloroethene	1.0		1.0	ug/L			04/07/22 15:21	1
trans-1,2-Dichloroethene	1.0		1.0	ug/L			04/07/22 15:21	1
Isopropylbenzene	1.0		1.0	ug/L			04/07/22 15:21	· · · · · · · · · · · · · · · · · · ·
Methyl tert-butyl ether	1.0		1.0	ug/L			04/07/22 15:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0		1.0	ug/L			04/07/22 15:21	1
1,2,4-Trichlorobenzene	1.0		1.0	ug/L ug/L			04/07/22 15:21	
1,2-Dichlorobenzene	1.0		1.0	ug/L			04/07/22 15:21	1
1,3-Dichlorobenzene	1.0		1.0	ug/L			04/07/22 15:21	1
1,4-Dichlorobenzene	1.0		1.0	ug/L			04/07/22 15:21	' 1
Trichlorofluoromethane	1.0		1.0	ug/L			04/07/22 15:21	1
Dibromochloromethane	1.0		1.0	ug/L			04/07/22 15:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		62 - 137		-		04/07/22 15:21	1
4-Bromofluorobenzene (Surr)	87		56 - 136				04/07/22 15:21	1
							04/07/00 45 04	

Eurofins Canton

04/07/22 15:21

78 - 122

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12

Client: ZF Active Safety and Electronics LLC Job ID: 240-164584-1

Project/Site: Milford

Date Received: 04/06/22 08:00

Client Sample ID: EQUIPMENT BLANK_040422 Lab Sample ID: 240-164584-2

Date Collected: 04/04/22 12:10

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

%Recovery Qualifier Limits Prepared Analyzed Dil Fac Dibromofluoromethane (Surr) 90 73 - 120 04/07/22 15:21

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Toluene-d8 (Surr)

Client Sample ID: FIELD BLANK_040422

Date Collected: 04/04/22 11:45 Date Received: 04/06/22 08:00 Lab Sample ID: 240-164584-3

Matrix: Water

Job ID: 240-164584-1

Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	ug/L			04/07/22 15:46	1
Benzene	1.0	U	1.0	ug/L			04/07/22 15:46	1
Bromodichloromethane	1.0	U	1.0	ug/L			04/07/22 15:46	1
Bromoform	1.0	U	1.0	ug/L			04/07/22 15:46	1
Bromomethane	1.0	U	1.0	ug/L			04/07/22 15:46	1
2-Butanone (MEK)	10	U	10	ug/L			04/07/22 15:46	1
Carbon disulfide	1.0	U	1.0	ug/L			04/07/22 15:46	1
Carbon tetrachloride	1.0	U	1.0	ug/L			04/07/22 15:46	1
Chlorobenzene	1.0	U	1.0	ug/L			04/07/22 15:46	1
Chloroethane	1.0	U	1.0	ug/L			04/07/22 15:46	1
Chloroform	1.0	U	1.0	ug/L			04/07/22 15:46	1
Chloromethane	1.0	U	1.0	ug/L			04/07/22 15:46	1
1,1-Dichloroethane	1.0	U	1.0	ug/L			04/07/22 15:46	1
1,2-Dichloroethane	1.0		1.0	ug/L			04/07/22 15:46	1
1,1-Dichloroethene	1.0	U	1.0	ug/L			04/07/22 15:46	1
1,2-Dichloropropane	1.0	U	1.0	ug/L			04/07/22 15:46	1
cis-1,3-Dichloropropene	1.0	U	1.0	ug/L			04/07/22 15:46	1
trans-1,3-Dichloropropene	1.0	U	1.0	ug/L			04/07/22 15:46	1
Ethylbenzene	1.0	U	1.0	ug/L			04/07/22 15:46	1
2-Hexanone	10	U	10	ug/L			04/07/22 15:46	1
Methylene Chloride	5.0	U	5.0	ug/L			04/07/22 15:46	1
4-Methyl-2-pentanone (MIBK)	10		10	ug/L			04/07/22 15:46	1
Styrene	1.0		1.0	ug/L			04/07/22 15:46	1
1,1,2,2-Tetrachloroethane	1.0		1.0	ug/L			04/07/22 15:46	1
Tetrachloroethene	1.0		1.0	ug/L			04/07/22 15:46	
Toluene	1.0		1.0	ug/L			04/07/22 15:46	1
Trichloroethene	1.0		1.0	ug/L			04/07/22 15:46	1
Vinyl chloride	1.0		1.0	ug/L			04/07/22 15:46	1
Xylenes, Total	2.0		2.0	ug/L			04/07/22 15:46	1
1,1,1-Trichloroethane	1.0		1.0	ug/L			04/07/22 15:46	1
1,1,2-Trichloroethane	1.0		1.0	ug/L			04/07/22 15:46	1
1,2-Dibromo-3-Chloropropane	2.0		2.0	ug/L			04/07/22 15:46	1
1,2-Dibromoethane	1.0		1.0	ug/L			04/07/22 15:46	1
Dichlorodifluoromethane	1.0		1.0	ug/L			04/07/22 15:46	1
cis-1,2-Dichloroethene	1.0		1.0	ug/L			04/07/22 15:46	1
trans-1,2-Dichloroethene	1.0		1.0	ug/L			04/07/22 15:46	1
Isopropylbenzene	1.0		1.0	ug/L			04/07/22 15:46	
Methyl tert-butyl ether	1.0		1.0	ug/L			04/07/22 15:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0		1.0	ug/L			04/07/22 15:46	1
1,2,4-Trichlorobenzene	1.0		1.0	ug/L			04/07/22 15:46	
1,2-Dichlorobenzene	1.0		1.0	ug/L			04/07/22 15:46	. 1
1,3-Dichlorobenzene	1.0		1.0	ug/L			04/07/22 15:46	1
1,4-Dichlorobenzene	1.0		1.0	ug/L			04/07/22 15:46	
Trichlorofluoromethane	1.0		1.0	ug/L			04/07/22 15:46	1
Dibromochloromethane	1.0		1.0	ug/L			04/07/22 15:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		62 - 137		-		04/07/22 15:46	1
4-Bromofluorobenzene (Surr)	85		56 - 136				04/07/22 15:46	1
- · · · · · · ·			70 400				0.4/07/00 45 40	

Eurofins Canton

04/07/22 15:46

78 - 122

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Client: ZF Active Safety and Electronics LLC Job ID: 240-164584-1

Project/Site: Milford

Date Received: 04/06/22 08:00

Client Sample ID: FIELD BLANK_040422 Lab Sample ID: 240-164584-3

Date Collected: 04/04/22 11:45 **Matrix: Water**

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

%Recovery Qualifier Limits Prepared Analyzed Dil Fac Dibromofluoromethane (Surr) 90 73 - 120 04/07/22 15:46

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Client Sample ID: TRIP BLANK

Date Collected: 04/04/22 00:00 Date Received: 04/06/22 08:00

4-Bromofluorobenzene (Surr)

Toluene-d8 (Surr)

Lab Sample ID: 240-164584-4

Matrix: Water

Job ID: 240-164584-1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	ug/L			04/07/22 16:12	1
Benzene	1.0	U	1.0	ug/L			04/07/22 16:12	1
Bromodichloromethane	1.0	U	1.0	ug/L			04/07/22 16:12	1
Bromoform	1.0	U	1.0	ug/L			04/07/22 16:12	1
Bromomethane	1.0	U	1.0	ug/L			04/07/22 16:12	1
2-Butanone (MEK)	10	U	10	ug/L			04/07/22 16:12	1
Carbon disulfide	1.0	U	1.0	ug/L			04/07/22 16:12	1
Carbon tetrachloride	1.0	U	1.0	ug/L			04/07/22 16:12	1
Chlorobenzene	1.0	U	1.0	ug/L			04/07/22 16:12	1
Chloroethane	1.0	Ü	1.0	ug/L			04/07/22 16:12	1
Chloroform	1.0	U	1.0	ug/L			04/07/22 16:12	1
Chloromethane	1.0	U	1.0	ug/L			04/07/22 16:12	1
1,1-Dichloroethane	1.0	U	1.0	ug/L			04/07/22 16:12	1
1,2-Dichloroethane	1.0	U	1.0	ug/L			04/07/22 16:12	1
1,1-Dichloroethene	1.0		1.0	ug/L			04/07/22 16:12	1
1,2-Dichloropropane	1.0		1.0	ug/L			04/07/22 16:12	1
cis-1,3-Dichloropropene	1.0	U	1.0	ug/L			04/07/22 16:12	1
trans-1,3-Dichloropropene	1.0	U	1.0	ug/L			04/07/22 16:12	1
Ethylbenzene	1.0	U	1.0	ug/L			04/07/22 16:12	1
2-Hexanone	10		10	ug/L			04/07/22 16:12	1
Methylene Chloride	5.0		5.0	ug/L			04/07/22 16:12	1
4-Methyl-2-pentanone (MIBK)	10		10	ug/L			04/07/22 16:12	· · · · · · · · · · · 1
Styrene	1.0		1.0	ug/L			04/07/22 16:12	1
1,1,2,2-Tetrachloroethane	1.0		1.0	ug/L			04/07/22 16:12	1
Tetrachloroethene	1.0		1.0	ug/L			04/07/22 16:12	· · · · · · · · · · · · · · · · · · ·
Toluene	1.0		1.0	ug/L			04/07/22 16:12	1
Trichloroethene	1.0		1.0	ug/L			04/07/22 16:12	1
Vinyl chloride	1.0		1.0	ug/L			04/07/22 16:12	· · · · · · · · · · · · · · · · · · ·
Xylenes, Total	2.0		2.0	ug/L			04/07/22 16:12	1
1,1,1-Trichloroethane	1.0		1.0	ug/L			04/07/22 16:12	1
1,1,2-Trichloroethane	1.0		1.0	ug/L			04/07/22 16:12	
1,2-Dibromo-3-Chloropropane	2.0		2.0	ug/L			04/07/22 16:12	1
1,2-Dibromoethane	1.0		1.0	ug/L			04/07/22 16:12	1
Dichlorodifluoromethane	1.0		1.0	ug/L			04/07/22 16:12	
cis-1,2-Dichloroethene	1.0		1.0	ug/L ug/L			04/07/22 16:12	1
trans-1,2-Dichloroethene	1.0		1.0	ug/L ug/L			04/07/22 16:12	1
	1.0							
Isopropylbenzene			1.0	ug/L			04/07/22 16:12	1
Methyl tert-butyl ether	1.0		1.0	ug/L			04/07/22 16:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0		1.0	ug/L			04/07/22 16:12 04/07/22 16:12	
1,2,4-Trichlorobenzene	1.0		1.0	ug/L				1
1,2-Dichlorobenzene	1.0		1.0	ug/L			04/07/22 16:12	1
1,3-Dichlorobenzene	1.0		1.0	ug/L			04/07/22 16:12	
1,4-Dichlorobenzene	1.0		1.0	ug/L			04/07/22 16:12	1
Trichlorofluoromethane	1.0		1.0	ug/L			04/07/22 16:12	1
Dibromochloromethane	1.0	U	1.0	ug/L			04/07/22 16:12	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		62 - 137		-		04/07/22 16:12	1
' /								

Eurofins Canton

04/07/22 16:12

04/07/22 16:12

56 - 136

78 - 122

86

Client: ZF Active Safety and Electronics LLC Job ID: 240-164584-1

Project/Site: Milford

Date Received: 04/06/22 08:00

Client Sample ID: TRIP BLANK Lab Sample ID: 240-164584-4

Date Collected: 04/04/22 00:00

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

%Recovery Qualifier Limits Prepared Analyzed Dil Fac Dibromofluoromethane (Surr) 92 73 - 120 04/07/22 16:12

Surrogate Summary

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Li							
		DCA	BFB	TOL	DBFM				
Lab Sample ID	Client Sample ID	(62-137)	(56-136)	(78-122)	(73-120)				
240-164584-1	OW-16D2_040422	105	85	98	93				
240-164584-2	EQUIPMENT BLANK_040422	104	87	98	90				
240-164584-3	FIELD BLANK_040422	105	85	97	90				
240-164584-4	TRIP BLANK	104	86	97	92				
LCS 240-522044/5	Lab Control Sample	97	98	97	89				
MB 240-522044/9	Method Blank	102	89	97	89				

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

DBFM = Dibromofluoromethane (Surr)

Eurofins Canton

Job ID: 240-164584-1

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Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-522044/9

Matrix: Water

1,2-Dichloroethane-d4 (Surr)

Client Sample ID: Method Blank Prep Type: Total/NA

Job ID: 240-164584-1

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	ug/L			04/07/22 14:06	1
Benzene	1.0	U	1.0	ug/L			04/07/22 14:06	1
Bromodichloromethane	1.0	U	1.0	ug/L			04/07/22 14:06	1
Bromoform	1.0	U	1.0	ug/L			04/07/22 14:06	1
Bromomethane	1.0	U	1.0	ug/L			04/07/22 14:06	1
2-Butanone (MEK)	10	U	10	ug/L			04/07/22 14:06	1
Carbon disulfide	1.0	U	1.0	ug/L			04/07/22 14:06	1
Carbon tetrachloride	1.0	U	1.0	ug/L			04/07/22 14:06	1
Chlorobenzene	1.0	U	1.0	ug/L			04/07/22 14:06	1
Chloroethane	1.0	U	1.0	ug/L			04/07/22 14:06	1
Chloroform	1.0	U	1.0	ug/L			04/07/22 14:06	1
Chloromethane	1.0	U	1.0	ug/L			04/07/22 14:06	1
1,1-Dichloroethane	1.0	U	1.0	ug/L			04/07/22 14:06	1
1,2-Dichloroethane	1.0	U	1.0	ug/L			04/07/22 14:06	1
1,1-Dichloroethene	1.0	U	1.0	ug/L			04/07/22 14:06	1
1,2-Dichloropropane	1.0	U	1.0	ug/L			04/07/22 14:06	1
cis-1,3-Dichloropropene	1.0	U	1.0	ug/L			04/07/22 14:06	1
trans-1,3-Dichloropropene	1.0	U	1.0	ug/L			04/07/22 14:06	1
Ethylbenzene	1.0	U	1.0	ug/L			04/07/22 14:06	1
2-Hexanone	10	U	10	ug/L			04/07/22 14:06	1
Methylene Chloride	5.0	U	5.0	ug/L			04/07/22 14:06	1
4-Methyl-2-pentanone (MIBK)	10	U	10	ug/L			04/07/22 14:06	1
Styrene	1.0	U	1.0	ug/L			04/07/22 14:06	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	ug/L			04/07/22 14:06	1
Tetrachloroethene	1.0	U	1.0	ug/L			04/07/22 14:06	1
Toluene	1.0	U	1.0	ug/L			04/07/22 14:06	1
Trichloroethene	1.0	U	1.0	ug/L			04/07/22 14:06	1
Vinyl chloride	1.0	U	1.0	ug/L			04/07/22 14:06	1
Xylenes, Total	2.0	U	2.0	ug/L			04/07/22 14:06	1
1,1,1-Trichloroethane	1.0	U	1.0	ug/L			04/07/22 14:06	1
1,1,2-Trichloroethane	1.0	U	1.0	ug/L			04/07/22 14:06	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	ug/L			04/07/22 14:06	1
1,2-Dibromoethane	1.0	U	1.0	ug/L			04/07/22 14:06	1
Dichlorodifluoromethane	1.0	U	1.0	ug/L			04/07/22 14:06	1
cis-1,2-Dichloroethene	1.0	U	1.0	ug/L			04/07/22 14:06	1
trans-1,2-Dichloroethene	1.0	U	1.0	ug/L			04/07/22 14:06	1
Isopropylbenzene	1.0	U	1.0	ug/L			04/07/22 14:06	1
Methyl tert-butyl ether	1.0	U	1.0	ug/L			04/07/22 14:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	ug/L			04/07/22 14:06	1
1,2,4-Trichlorobenzene	1.0	U	1.0	ug/L			04/07/22 14:06	1
1,2-Dichlorobenzene	1.0	U	1.0	ug/L			04/07/22 14:06	1
1,3-Dichlorobenzene	1.0	U	1.0	ug/L			04/07/22 14:06	1
1,4-Dichlorobenzene	1.0	U	1.0	ug/L			04/07/22 14:06	1
Trichlorofluoromethane	1.0	U	1.0	ug/L			04/07/22 14:06	1
Dibromochloromethane	1.0	U	1.0	ug/L			04/07/22 14:06	1
		MB						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1 2 Diableranthone d1 (Curr)	100		60 107				04/07/00 44:06	

Eurofins Canton

4/13/2022

04/07/22 14:06

62 - 137

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Job ID: 240-164584-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-522044/9

Matrix: Water

Analysis Batch: 522044

Client Sample ID: Method Blank

Prep Type: Total/NA

MB MB %Recovery Surrogate Qualifier Limits Prepared Dil Fac Analyzed 4-Bromofluorobenzene (Surr) 89 56 - 136 04/07/22 14:06 Toluene-d8 (Surr) 97 78 - 122 04/07/22 14:06 Dibromofluoromethane (Surr) 89 73 - 120 04/07/22 14:06

Lab Sample ID: LCS 240-522044/5

Matrix: Water

1,1,2-Trichloroethane

1,2-Dibromoethane

Isopropylbenzene

ne

Dichlorodifluoromethane

trans-1,2-Dichloroethene

1,1,2-Trichloro-1,2,2-trifluoroetha

cis-1,2-Dichloroethene

Methyl tert-butyl ether

1,2-Dibromo-3-Chloropropane

Analysis Batch: 522044

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

•	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Acetone	50.0	73.4		ug/L		147	50 - 149	
Benzene	25.0	25.7		ug/L		103	77 - 123	
Bromodichloromethane	25.0	27.4		ug/L		110	69 - 126	
Bromoform	25.0	23.4		ug/L		94	57 - 129	
Bromomethane	25.0	25.9		ug/L		103	36 - 142	
2-Butanone (MEK)	50.0	55.9		ug/L		112	54 - 156	
Carbon disulfide	25.0	22.8		ug/L		91	43 - 140	
Carbon tetrachloride	25.0	27.3		ug/L		109	55 - 137	
Chlorobenzene	25.0	26.1		ug/L		104	80 - 121	
Chloroethane	25.0	26.1		ug/L		104	38 - 152	
Chloroform	25.0	25.5		ug/L		102	74 - 122	
Chloromethane	25.0	27.6		ug/L		110	47 - 143	
1,1-Dichloroethane	25.0	25.1		ug/L		101	72 - 127	
1,2-Dichloroethane	25.0	26.9		ug/L		108	66 - 128	
1,1-Dichloroethene	25.0	23.4		ug/L		94	63 - 134	
1,2-Dichloropropane	25.0	27.7		ug/L		111	75 - 133	
cis-1,3-Dichloropropene	25.0	27.9		ug/L		111	64 - 130	
trans-1,3-Dichloropropene	25.0	29.6		ug/L		118	57 - 129	
Ethylbenzene	25.0	27.8		ug/L		111	80 - 121	
2-Hexanone	50.0	66.7		ug/L		133	43 - 167	
Methylene Chloride	25.0	26.6		ug/L		106	71 - 125	
4-Methyl-2-pentanone (MIBK)	50.0	63.5		ug/L		127	46 - 158	
Styrene	25.0	28.7		ug/L		115	80 - 135	
1,1,2,2-Tetrachloroethane	25.0	30.9		ug/L		123	58 - 157	
Tetrachloroethene	25.0	24.0		ug/L		96	76 - 123	
Toluene	25.0	26.6		ug/L		106	80 - 123	
Trichloroethene	25.0	23.2		ug/L		93	70 - 122	
Vinyl chloride	25.0	27.1		ug/L		109	60 - 144	
Xylenes, Total	50.0	55.9		ug/L		112	80 - 121	
1,1,1-Trichloroethane	25.0	25.8		ug/L		103	64 - 131	

Eurofins Canton

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25.0

25.0

25.0

27.2

24.7

27.1

20.2

24.6

24.4

28.8

26.4

20.8

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

109

99

108

81

98

98

115

106

83

70 - 138

53 - 135

71 - 134

34 - 153

77 - 123

75 - 124

74 - 128

65 - 126

51 - 146

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Job ID: 240-164584-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-522044/5

Matrix: Water

Analysis Batch: 522044

Client Sample ID: Lab Control Sample

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,2,4-Trichlorobenzene	25.0	30.1		ug/L		120	44 - 147	
1,2-Dichlorobenzene	25.0	27.6		ug/L		110	78 - 120	
1,3-Dichlorobenzene	25.0	27.1		ug/L		108	80 - 120	
1,4-Dichlorobenzene	25.0	26.8		ug/L		107	80 - 120	
Trichlorofluoromethane	25.0	28.0		ug/L		112	30 - 170	
Dibromochloromethane	25.0	27.5		ug/L		110	70 - 124	
m-Xylene & p-Xylene	25.0	27.8		ug/L		111	80 - 120	
o-Xylene	25.0	28.1		ug/L		112	80 - 123	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		62 - 137
4-Bromofluorobenzene (Surr)	98		56 - 136
Toluene-d8 (Surr)	97		78 - 122
Dibromofluoromethane (Surr)	89		73 - 120

Prep Type: Total/NA

QC Association Summary

Client: ZF Active Safety and Electronics LLC Job ID: 240-164584-1

Project/Site: Milford

GC/MS VOA

Analysis Batch: 522044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-164584-1	OW-16D2_040422	Total/NA	Water	8260B	
240-164584-2	EQUIPMENT BLANK_040422	Total/NA	Water	8260B	
240-164584-3	FIELD BLANK_040422	Total/NA	Water	8260B	
240-164584-4	TRIP BLANK	Total/NA	Water	8260B	
MB 240-522044/9	Method Blank	Total/NA	Water	8260B	
LCS 240-522044/5	Lab Control Sample	Total/NA	Water	8260B	

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Lab Chronicle

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Client Sample ID: OW-16D2 040422 Lab Sample ID: 240-164584-1

Date Collected: 04/04/22 11:55 **Matrix: Water**

Date Received: 04/06/22 08:00

Batch Dilution Batch **Batch Prepared** Method or Analyzed **Prep Type** Type Run **Factor** Number Analyst Lab Total/NA Analysis 8260B 522044 04/07/22 17:02 SAM TAL CAN

Client Sample ID: EQUIPMENT BLANK 040422

Date Collected: 04/04/22 12:10

Date Received: 04/06/22 08:00

Batch Batch Dilution **Batch** Prepared **Prep Type** Type Method Run Factor Number or Analyzed Analyst Lab Total/NA Analysis 8260B 522044 04/07/22 15:21 SAM TAL CAN

Client Sample ID: FIELD BLANK_040422 Lab Sample ID: 240-164584-3

Date Collected: 04/04/22 11:45

Date Received: 04/06/22 08:00 Batch Batch Dilution Batch **Prepared**

Prep Type Method **Factor** Number or Analyzed Type Run Analyst Lab TAL CAN Total/NA Analysis 8260B 522044 04/07/22 15:46 SAM

Client Sample ID: TRIP BLANK Lab Sample ID: 240-164584-4

Date Collected: 04/04/22 00:00

Date Received: 04/06/22 08:00

Batch **Batch** Dilution Batch **Prepared Prep Type** Method Run Factor Number or Analyzed Analyst Type Lab Analysis 8260B 522044 04/07/22 16:12 SAM TAL CAN Total/NA

Laboratory References:

TAL CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Job ID: 240-164584-1

Matrix: Water

Matrix: Water

Matrix: Water

Lab Sample ID: 240-164584-2

Accreditation/Certification Summary

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Job ID: 240-164584-1

Laboratory: Eurofins Canton

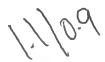
All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date		
California	State	2927	02-27-23		
Connecticut	State	PH-0590	12-31-23		
Florida	NELAP	E87225	06-30-22		
Georgia	State	4062	02-23-22 *		
Illinois	NELAP	200004	07-31-22		
Iowa	State	421	06-01-23		
Kansas	NELAP	E-10336	04-30-22		
Kentucky (UST)	State	112225	02-23-22 *		
Kentucky (WW)	State	KY98016	12-31-22		
Minnesota	NELAP	039-999-348	12-31-22		
Minnesota (Petrofund)	State	3506	08-01-23		
New Jersey	NELAP	OH001	11-06-22		
New York	NELAP	10975	04-01-23		
Ohio	State	8303	02-23-23		
Ohio VAP	State	CL0024	02-27-23		
Oregon	NELAP	4062	02-27-23		
Pennsylvania	NELAP	68-00340	08-31-22		
Texas	NELAP	T104704517-22-16	08-31-22		
Virginia	NELAP	11570	09-14-22		
Washington	State	C971	01-12-23		
West Virginia DEP	State	210	12-31-22		

 $^{^{\}star} \ \text{Accreditation/Certification renewal pending - accreditation/certification considered valid}.$

Eurofins Canton





STL North Canton						- 47												T	LAB USE ONLY
4101 Shuffel Drive NW					721		Chain	Of Cu	stod	v/	Anal	vsis R	eaue	129					ID No. (Lot No.)
North Canton, OH 44720												y 515 1.	- qu	.,,				Datostatos	777 1404 (204 140.)
Aim Michael DelMonico				Privileged &	onfidential		Yes			Site No	one:	Milford							
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Bob Bleazard				Marina Samp	and Sharon Clouse					1									
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Analysis Level	Level 1 (k			Sampler	Stace	u Ha	nnula			1 3					8				
TAT	10 Busine	ss Days (S	standard - Level 1)	Deliverable	EDD/PDF (e-m					bos			1		0				
		Sa	mple Identification a	nd Infor	nation					or Composite	Filtered				Chain of				
Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Dat	e Sample Fime	Sample Type	Sample Matrix	Sample Purpose	No. of Cont.	Grab o	Field Fi				f Custody			1.0	b Sample Numbers
1 OW-16D2			OW-16D2_040422	4.4.2	2 1155	GW	WATER	REG	3	G	X				tody				
2				-1			me I												
3 EQUIPMENT BLANK		Tew I	EQUIPMENT BLANK 04041	2	1210	QC	WATER	REG	ī	G	N X								
4 FIELD BLANK			FIELD BLANK 0404	2	1145	QC	WATER	REG	1	G	NX								
5 TRIP BLANK			TRIP BLANK_			QC	WATER	REG	1	G	NX								
6							W1 12.												
7														1	1 1 1	1			
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9																			
10																			
11																			
Special Instructions																			
Stacey Harm	la		Arcodi's			Received h	N//			Compa	d				Condition		Custody	Seals Intact	
			Date Fine 44.22 2:19	Ď		ZIA				Date T	me 4/4	187 1417	-		Cooler Temp				
Relinquitted by			Company ATTH			Received b	r /				EE				Condition		Custody	Seals Intact	
diffe			Date Time 4/4/27 14/20			Cold	storigi	0		Date 1	4-27	1700			Cooler Temp				
Relinquished by	-1	1	Company FETA			Walle !	1/0	_		Compa	ET	MIC			Condition		Custody	Sends Intact	
Cold Storage to	1. Ha	rlin	Date time 45-22 1054			1'en						.22 3) 4		Cooler Lemp				
reaniquistica by:			Company Date Time			Received h	1,4			Compa			-		Condition		Custody	/ Seals Intact	
			Date time							Date 1	ime				Cooler Temp	9			
Preservatives Code: 0 = None; 1 = HC	L; 2 = HN0	03; 3 = H	2SO4; 4 = NaOH; 5 = Zn. Acetate;	6 - MeOH; 7	- NaHSO4; 8 - Ot	her (specify):												





Eurofins TestAmerica	Canton Sample Rece	ipt Form/Narrativ		Login#:	164584
Canton Facility Client TRIN		C'a-N		Cooler un	packed by:
	(-22	Opened on 4. C	-71	Mat	
Cooler Received on 4	IDO FACCOL				
FedEx: 1" Grd Exp		Chent Drop On	TestAmerica Courier	Other	
Receipt After-bours: Dre		Client Cooler	Storage Location		
1. Cooler temperature will IR GUNW IR-14 (CF IR GUNW IR-15 (CF IR GUN #IR-15 (CF IR	d: Subble Wrap d: Subble Wrap For the Blue Ice pon receipt G-0.2 °C) Observed Condition seals on the outside of the cooler dy seals on the bottle(s) dy seals intact and unconstructed to the cooler(s) company the sample(s) ers relinquished & signer s) who collected the samen good condition (Unbred) (ID/Date/Time) be reconstructed to perform indicate samples and all listed on the cooler(s) the COC specify preser used for the test(s) indicates samples and all listed on the cooler(s) Thave been checked at mple(s) at the correct phase COC? mm in any VOA vials? k present in the cooler(s)	Dry Ice Water Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. If Yes (s) signed & dated? Or bottle kits (LLHg Impromised? Corbonised? In the appropriate papers clearly identified with the COC Vatives (TN) # of cooler Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler Temp. Cooler	None None None See Multiple Cooler Fe C Corrected Cooler C Corrected Cooler C Corrected Cooler Yes MeHg)? Yes Ince? In this. Yes O O H Z O 1 G Yes	Temp. No No No No No No No No No No No No No	Tests that are not checked for pH by Receiving: VOAs Oil and Grease TOC Tab/comp(Y/N)?
	Date	by			er
Concerning					
18. CHAIN OF CUSTO	DY & SAMPLE DISC	REPANCIES 0	dditional next page	Samples proc	essed by:
19. SAMPLE CONDITI Sample(s) Sample(s) Sample(s)			were received	in a broken co	otainer.
20. SAMPLE PRESERV					
Sample(s)			33000 £1	har processed i	n the laboratory.
Sample(s) Time preserved:	Preservative(s) ad	ded/Lot number(s):	were lutti	ilei preserveu i	
VOA Sample Preservation					

WI-NC-099



Environment Testing America

ANALYTICAL REPORT

Eurofins Canton 180 S. Van Buren Avenue Barberton, OH 44203 Tel: (330)497-9396

Laboratory Job ID: 240-164831-1 Client Project/Site: TRW Milford

For:

ZF Active Safety and Electronics LLC Tech 2 12025 Tech Center Drive Livonia, Michigan 48150

Attn: Scott Detwiler

Mode Del Your

Authorized for release by: 4/14/2022 2:32:39 PM

Michael DelMonico, Project Manager I (330)497-9396

Michael.DelMonico@et.eurofinsus.com

Links

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Total Access

Have a Question?



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www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ZF Active Safety and Electronics LLC

Job ID: 240-164831-1 Project/Site: TRW Milford

Qualifiers

GC/MS VOA

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.

Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery **CFL** Contains Free Liquid CFU Colony Forming Unit CNF Contains No Free Liquid

Duplicate Error Ratio (normalized absolute difference) **DER**

Dil Fac **Dilution Factor**

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

Estimated Detection Limit (Dioxin) **EDL** LOD Limit of Detection (DoD/DOE) LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level" MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit MLMinimum Level (Dioxin) MPN Most Probable Number Method Quantitation Limit MQL

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive QC **Quality Control**

Relative Error Ratio (Radiochemistry) **RER**

Reporting Limit or Requested Limit (Radiochemistry) RL

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin) **TEQ** Toxicity Equivalent Quotient (Dioxin)

Too Numerous To Count **TNTC**

Eurofins Canton

4/14/2022

Case Narrative

Client: ZF Active Safety and Electronics LLC

Project/Site: TRW Milford

Job ID: 240-164831-1

Job ID: 240-164831-1

Laboratory: Eurofins Canton

Narrative

Job Narrative 240-164831-1

Comments

No additional comments.

Receipt

The samples were received on 4/9/2022~8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.1° C.

GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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Method Summary

Client: ZF Active Safety and Electronics LLC

Project/Site: TRW Milford

 Method
 Method Description
 Protocol
 Laboratory

 8260B
 Volatile Organic Compounds (GC/MS)
 SW846
 TAL CAN

 5030B
 Purge and Trap
 SW846
 TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Job ID: 240-164831-1

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Sample Summary

Client: ZF Active Safety and Electronics LLC Project/Site: TRW Milford

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-164831-1	OW-16D2_040822	Water	04/08/22 11:35	04/09/22 08:00
240-164831-2	EQUIPMENT BLANK_040822	Water	04/08/22 11:50	04/09/22 08:00
240-164831-3	FIELD BLANK_040822	Water	04/08/22 10:35	04/09/22 08:00
240-164831-4	TRIP BLANK	Water	04/08/22 10:35	04/09/22 08:00

Job ID: 240-164831-1

Detection Summary

Client: ZF Active Safety and Electronics LLC Job

Project/Site: TRW Milford

Client Sample ID: OW-16D2_040822	Lab Sample ID: 240-164831-1

Analyte	Result Qualifier	RL	Unit	Dil Fac D	Method	Prep Type
1,1-Dichloroethane	3.0	1.0	ug/L		8260B	Total/NA
cis-1,2-Dichloroethene	18	1.0	ug/L	1	8260B	Total/NA
trans-1,2-Dichloroethene	1.5	1.0	ug/L	1	8260B	Total/NA

No Detections.

Client Sample ID: FIELD BLANK_040822 Lab Sample ID: 240-164831-3

No Detections.

Client Sample ID: TRIP BLANK Lab Sample ID: 240-164831-4

No Detections.

This Detection Summary does not include radiochemical test results.

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Client: ZF Active Safety and Electronics LLC Job ID: 240-164831-1

Project/Site: TRW Milford

Client Sample ID: OW-16D2_040822

Date Collected: 04/08/22 11:35

Date Received: 04/09/22 08:00

Lab Sample ID: 240-164831-1

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	ug/L			04/13/22 15:59	
Benzene	1.0	U	1.0	ug/L			04/13/22 15:59	
Bromodichloromethane	1.0	U	1.0	ug/L			04/13/22 15:59	
Bromoform	1.0	U	1.0	ug/L			04/13/22 15:59	· · · · · · · · ·
Bromomethane	1.0	U	1.0	ug/L			04/13/22 15:59	
2-Butanone (MEK)	10	U	10	ug/L			04/13/22 15:59	
Carbon disulfide	1.0	U	1.0	ug/L			04/13/22 15:59	
Carbon tetrachloride	1.0	U	1.0	ug/L			04/13/22 15:59	•
Chlorobenzene	1.0	U	1.0	ug/L			04/13/22 15:59	
Chloroethane	1.0	U	1.0	ug/L			04/13/22 15:59	,
Chloroform	1.0	U	1.0	ug/L			04/13/22 15:59	
Chloromethane	1.0	U	1.0	ug/L			04/13/22 15:59	
1,1-Dichloroethane	3.0		1.0	ug/L			04/13/22 15:59	1
1,2-Dichloroethane	1.0	U	1.0	ug/L			04/13/22 15:59	
1,1-Dichloroethene	1.0	U	1.0	ug/L			04/13/22 15:59	
1,2-Dichloropropane	1.0	U	1.0	ug/L			04/13/22 15:59	1
cis-1,3-Dichloropropene	1.0	U	1.0	ug/L			04/13/22 15:59	
trans-1,3-Dichloropropene	1.0	U	1.0	ug/L			04/13/22 15:59	1
Ethylbenzene	1.0		1.0	ug/L			04/13/22 15:59	1
2-Hexanone	10	U	10	ug/L			04/13/22 15:59	1
Methylene Chloride	5.0	U	5.0	ug/L			04/13/22 15:59	1
4-Methyl-2-pentanone (MIBK)	10		10	ug/L			04/13/22 15:59	
Styrene	1.0		1.0	ug/L			04/13/22 15:59	
1,1,2,2-Tetrachloroethane	1.0		1.0	ug/L			04/13/22 15:59	1
Tetrachloroethene	1.0		1.0	ug/L			04/13/22 15:59	· · · · · · · · · · · · · · · · · · ·
Toluene	1.0		1.0	ug/L			04/13/22 15:59	1
Trichloroethene	1.0		1.0	ug/L			04/13/22 15:59	
Vinyl chloride	1.0		1.0	ug/L			04/13/22 15:59	
Xylenes, Total	2.0		2.0	ug/L			04/13/22 15:59	
1,1,1-Trichloroethane	1.0		1.0	ug/L			04/13/22 15:59	
1,1,2-Trichloroethane	1.0		1.0	ug/L			04/13/22 15:59	
1,2-Dibromo-3-Chloropropane	2.0		2.0	ug/L			04/13/22 15:59	1
1,2-Dibromoethane	1.0		1.0	ug/L			04/13/22 15:59	
Dichlorodifluoromethane	1.0		1.0	ug/L			04/13/22 15:59	
cis-1,2-Dichloroethene	18	J	1.0	ug/L			04/13/22 15:59	1
trans-1,2-Dichloroethene	1.5		1.0	ug/L			04/13/22 15:59	
Isopropylbenzene	1.0		1.0	ug/L			04/13/22 15:59	· · · · · · · · · · · · · · · · · · ·
Methyl tert-butyl ether	1.0		1.0	ug/L			04/13/22 15:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0		1.0	ug/L			04/13/22 15:59	
1,2,4-Trichlorobenzene	1.0		1.0	ug/L			04/13/22 15:59	
1,2-Dichlorobenzene	1.0		1.0	ug/L			04/13/22 15:59	,
1,3-Dichlorobenzene	1.0		1.0	ug/L			04/13/22 15:59	,
1,4-Dichlorobenzene	1.0		1.0	ug/L			04/13/22 15:59	,
Trichlorofluoromethane	1.0		1.0	ug/L			04/13/22 15:59	
Dibromochloromethane	1.0		1.0	ug/L			04/13/22 15:59	,
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4 (Surr)	75		62 - 137		_		04/13/22 15:59	1
4-Bromofluorobenzene (Surr)	79		56 - 136				04/13/22 15:59	1
Toluene-d8 (Surr)	85		78 - 122				04/13/22 15:59	1

Eurofins Canton

4/14/2022

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Client: ZF Active Safety and Electronics LLC Job ID: 240-164831-1

Project/Site: TRW Milford

Date Collected: 04/08/22 11:35

Matrix: Water

Date Received: 04/09/22 08:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

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Client: ZF Active Safety and Electronics LLC

Project/Site: TRW Milford

Toluene-d8 (Surr)

Client Sample ID: EQUIPMENT BLANK_040822

Date Collected: 04/08/22 11:50 Date Received: 04/09/22 08:00

Job ID: 240-164831-1

Lab Sample ID: 240-164831-2

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Acetone	10	U	10	ug/L			04/13/22 16:24	
Benzene	1.0	U	1.0	ug/L			04/13/22 16:24	
Bromodichloromethane	1.0	U	1.0	ug/L			04/13/22 16:24	
Bromoform	1.0	U	1.0	ug/L			04/13/22 16:24	
Bromomethane	1.0	U	1.0	ug/L			04/13/22 16:24	
2-Butanone (MEK)	10	U	10	ug/L			04/13/22 16:24	
Carbon disulfide	1.0	U	1.0	ug/L			04/13/22 16:24	
Carbon tetrachloride	1.0	U	1.0	ug/L			04/13/22 16:24	
Chlorobenzene	1.0	U	1.0	ug/L			04/13/22 16:24	
Chloroethane	1.0	U	1.0	ug/L			04/13/22 16:24	
Chloroform	1.0	U	1.0	ug/L			04/13/22 16:24	
Chloromethane	1.0	U	1.0	ug/L			04/13/22 16:24	
1,1-Dichloroethane	1.0		1.0	ug/L			04/13/22 16:24	
1,2-Dichloroethane	1.0		1.0	ug/L			04/13/22 16:24	
1,1-Dichloroethene	1.0		1.0	ug/L			04/13/22 16:24	
1,2-Dichloropropane	1.0		1.0	ug/L			04/13/22 16:24	
cis-1,3-Dichloropropene	1.0		1.0	ug/L			04/13/22 16:24	
trans-1,3-Dichloropropene	1.0		1.0	ug/L			04/13/22 16:24	
Ethylbenzene	1.0		1.0	ug/L			04/13/22 16:24	
2-Hexanone	10		10	ug/L			04/13/22 16:24	
Methylene Chloride	5.0		5.0	ug/L			04/13/22 16:24	
4-Methyl-2-pentanone (MIBK)	10		10	ug/L			04/13/22 16:24	
Styrene	1.0		1.0	ug/L			04/13/22 16:24	
1,1,2,2-Tetrachloroethane	1.0		1.0	ug/L			04/13/22 16:24	
Tetrachloroethene	1.0		1.0	ug/L			04/13/22 16:24	
Toluene	1.0		1.0	ug/L			04/13/22 16:24	
Trichloroethene	1.0		1.0	ug/L			04/13/22 16:24	
	1.0		1.0				04/13/22 16:24	
Vinyl chloride	2.0		2.0	ug/L			04/13/22 16:24	
Xylenes, Total 1,1,1-Trichloroethane	1.0		1.0	ug/L			04/13/22 16:24	
				ug/L				
1,1,2-Trichloroethane	1.0		1.0	ug/L			04/13/22 16:24	
1,2-Dibromo-3-Chloropropane	2.0		2.0	ug/L			04/13/22 16:24	
1,2-Dibromoethane	1.0		1.0	ug/L			04/13/22 16:24	
Dichlorodifluoromethane	1.0		1.0	ug/L			04/13/22 16:24	
cis-1,2-Dichloroethene	1.0		1.0	ug/L			04/13/22 16:24	
trans-1,2-Dichloroethene	1.0		1.0	ug/L			04/13/22 16:24	
Isopropylbenzene	1.0		1.0	ug/L			04/13/22 16:24	
Methyl tert-butyl ether	1.0		1.0	ug/L			04/13/22 16:24	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0		1.0	ug/L			04/13/22 16:24	
1,2,4-Trichlorobenzene	1.0		1.0	ug/L			04/13/22 16:24	
1,2-Dichlorobenzene	1.0		1.0	ug/L			04/13/22 16:24	
1,3-Dichlorobenzene	1.0		1.0	ug/L			04/13/22 16:24	
1,4-Dichlorobenzene	1.0		1.0	ug/L			04/13/22 16:24	
Trichlorofluoromethane	1.0		1.0	ug/L			04/13/22 16:24	
Dibromochloromethane	1.0	U	1.0	ug/L			04/13/22 16:24	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4 (Surr)	79		62 - 137				04/13/22 16:24	
4-Bromofluorobenzene (Surr)	79		56 - 136				04/13/22 16:24	

Eurofins Canton

04/13/22 16:24

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Client: ZF Active Safety and Electronics LLC Job ID: 240-164831-1

Project/Site: TRW Milford

Client Sample ID: EQUIPMENT BLANK_040822 Lab Sample ID: 240-164831-2

Date Collected: 04/08/22 11:50

Matrix: Water

Date Received: 04/09/22 08:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

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Client: ZF Active Safety and Electronics LLC Job ID: 240-164831-1

Project/Site: TRW Milford

Toluene-d8 (Surr)

Client Sample ID: FIELD BLANK_040822

Date Collected: 04/08/22 10:35 Date Received: 04/09/22 08:00 Lab Sample ID: 240-164831-3

Matrix: Water

Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	ug/L			04/13/22 16:49	1
Benzene	1.0	U	1.0	ug/L			04/13/22 16:49	1
Bromodichloromethane	1.0	U	1.0	ug/L			04/13/22 16:49	1
Bromoform	1.0	U	1.0	ug/L			04/13/22 16:49	1
Bromomethane	1.0	U	1.0	ug/L			04/13/22 16:49	1
2-Butanone (MEK)	10	U	10	ug/L			04/13/22 16:49	1
Carbon disulfide	1.0	U	1.0	ug/L			04/13/22 16:49	1
Carbon tetrachloride	1.0	U	1.0	ug/L			04/13/22 16:49	1
Chlorobenzene	1.0	U	1.0	ug/L			04/13/22 16:49	1
Chloroethane	1.0	U	1.0	ug/L			04/13/22 16:49	1
Chloroform	1.0	U	1.0	ug/L			04/13/22 16:49	1
Chloromethane	1.0	U	1.0	ug/L			04/13/22 16:49	1
1,1-Dichloroethane	1.0	U	1.0	ug/L			04/13/22 16:49	1
1,2-Dichloroethane	1.0	U	1.0	ug/L			04/13/22 16:49	1
1,1-Dichloroethene	1.0	U	1.0	ug/L			04/13/22 16:49	1
1,2-Dichloropropane	1.0	U	1.0	ug/L			04/13/22 16:49	1
cis-1,3-Dichloropropene	1.0	U	1.0	ug/L			04/13/22 16:49	1
trans-1,3-Dichloropropene	1.0	U	1.0	ug/L			04/13/22 16:49	1
Ethylbenzene	1.0	U	1.0	ug/L			04/13/22 16:49	1
2-Hexanone	10	U	10	ug/L			04/13/22 16:49	1
Methylene Chloride	5.0	U	5.0	ug/L			04/13/22 16:49	1
4-Methyl-2-pentanone (MIBK)	10	U	10	ug/L			04/13/22 16:49	1
Styrene	1.0	U	1.0	ug/L			04/13/22 16:49	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	ug/L			04/13/22 16:49	1
Tetrachloroethene	1.0	U	1.0	ug/L			04/13/22 16:49	1
Toluene	1.0	U	1.0	ug/L			04/13/22 16:49	1
Trichloroethene	1.0	U	1.0	ug/L			04/13/22 16:49	1
Vinyl chloride	1.0	U	1.0	ug/L			04/13/22 16:49	1
Xylenes, Total	2.0	U	2.0	ug/L			04/13/22 16:49	1
1,1,1-Trichloroethane	1.0	U	1.0	ug/L			04/13/22 16:49	1
1,1,2-Trichloroethane	1.0	U	1.0	ug/L			04/13/22 16:49	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	ug/L			04/13/22 16:49	1
1,2-Dibromoethane	1.0	U	1.0	ug/L			04/13/22 16:49	1
Dichlorodifluoromethane	1.0	U	1.0	ug/L			04/13/22 16:49	1
cis-1,2-Dichloroethene	1.0	U	1.0	ug/L			04/13/22 16:49	1
trans-1,2-Dichloroethene	1.0	U	1.0	ug/L			04/13/22 16:49	1
Isopropylbenzene	1.0	U	1.0	ug/L			04/13/22 16:49	1
Methyl tert-butyl ether	1.0	U	1.0	ug/L			04/13/22 16:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	ug/L			04/13/22 16:49	1
1,2,4-Trichlorobenzene	1.0	U	1.0	ug/L			04/13/22 16:49	1
1,2-Dichlorobenzene	1.0	U	1.0	ug/L			04/13/22 16:49	1
1,3-Dichlorobenzene	1.0	U	1.0	ug/L			04/13/22 16:49	1
1,4-Dichlorobenzene	1.0	U	1.0	ug/L			04/13/22 16:49	1
Trichlorofluoromethane	1.0		1.0	ug/L			04/13/22 16:49	1
Dibromochloromethane	1.0	U	1.0	ug/L			04/13/22 16:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	76		62 - 137		-		04/13/22 16:49	1
4-Bromofluorobenzene (Surr)	79		56 - 136				04/13/22 16:49	1
T / (0.40)	2.4		70 100				0.4/4.0/00.46.40	

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04/13/22 16:49

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Client: ZF Active Safety and Electronics LLC Job ID: 240-164831-1

Project/Site: TRW Milford

Client Sample ID: FIELD BLANK_040822 Lab Sample ID: 240-164831-3

Date Collected: 04/08/22 10:35

Matrix: Water

Date Received: 04/09/22 08:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

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Client: ZF Active Safety and Electronics LLC Job ID: 240-164831-1

Project/Site: TRW Milford

Toluene-d8 (Surr)

Client Sample ID: TRIP BLANK

Date Collected: 04/08/22 10:35 Date Received: 04/09/22 08:00 Lab Sample ID: 240-164831-4

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	ug/L			04/13/22 17:14	
Benzene	1.0	U	1.0	ug/L			04/13/22 17:14	•
Bromodichloromethane	1.0	U	1.0	ug/L			04/13/22 17:14	1
Bromoform	1.0	U	1.0	ug/L			04/13/22 17:14	1
Bromomethane	1.0	U	1.0	ug/L			04/13/22 17:14	1
2-Butanone (MEK)	10	U	10	ug/L			04/13/22 17:14	1
Carbon disulfide	1.0	U	1.0	ug/L			04/13/22 17:14	1
Carbon tetrachloride	1.0	U	1.0	ug/L			04/13/22 17:14	1
Chlorobenzene	1.0	U	1.0	ug/L			04/13/22 17:14	1
Chloroethane	1.0	Ü	1.0	ug/L			04/13/22 17:14	1
Chloroform	1.0	U	1.0	ug/L			04/13/22 17:14	1
Chloromethane	1.0	U	1.0	ug/L			04/13/22 17:14	1
1,1-Dichloroethane	1.0	U	1.0	ug/L			04/13/22 17:14	1
1,2-Dichloroethane	1.0		1.0	ug/L			04/13/22 17:14	1
1,1-Dichloroethene	1.0		1.0	ug/L			04/13/22 17:14	1
1,2-Dichloropropane	1.0		1.0	ug/L			04/13/22 17:14	1
cis-1,3-Dichloropropene	1.0		1.0	ug/L			04/13/22 17:14	1
trans-1,3-Dichloropropene	1.0	U	1.0	ug/L			04/13/22 17:14	1
Ethylbenzene	1.0		1.0	ug/L			04/13/22 17:14	1
2-Hexanone	10		10	ug/L			04/13/22 17:14	1
Methylene Chloride	5.0		5.0	ug/L			04/13/22 17:14	1
4-Methyl-2-pentanone (MIBK)	10		10	ug/L			04/13/22 17:14	1
Styrene	1.0		1.0	ug/L			04/13/22 17:14	1
1,1,2,2-Tetrachloroethane	1.0		1.0	ug/L			04/13/22 17:14	
Tetrachloroethene	1.0		1.0	ug/L			04/13/22 17:14	· · · · · · · · · · · · · · · · · · ·
Toluene	1.0		1.0	ug/L			04/13/22 17:14	1
Trichloroethene	1.0		1.0	ug/L			04/13/22 17:14	1
Vinyl chloride	1.0		1.0	ug/L			04/13/22 17:14	
Xylenes, Total	2.0		2.0	ug/L			04/13/22 17:14	1
1,1,1-Trichloroethane	1.0		1.0	ug/L			04/13/22 17:14	1
1,1,2-Trichloroethane	1.0		1.0	ug/L			04/13/22 17:14	· · · · · · · · · · · · · · · · · · ·
1,2-Dibromo-3-Chloropropane	2.0		2.0	ug/L			04/13/22 17:14	
1,2-Dibromoethane	1.0		1.0	ug/L			04/13/22 17:14	1
Dichlorodifluoromethane	1.0		1.0	ug/L			04/13/22 17:14	
cis-1,2-Dichloroethene	1.0		1.0	ug/L			04/13/22 17:14	. 1
trans-1,2-Dichloroethene	1.0		1.0	ug/L			04/13/22 17:14	1
Isopropylbenzene	1.0		1.0	ug/L			04/13/22 17:14	
Methyl tert-butyl ether	1.0		1.0	ug/L			04/13/22 17:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0		1.0	ug/L ug/L			04/13/22 17:14	1
1,2,4-Trichlorobenzene	1.0		1.0	ug/L			04/13/22 17:14	' 1
1,2-Dichlorobenzene	1.0		1.0				04/13/22 17:14	1
1,3-Dichlorobenzene	1.0		1.0	ug/L ug/L			04/13/22 17:14	1
1,4-Dichlorobenzene	1.0						04/13/22 17:14	
Trichlorofluoromethane			1.0	ug/L				1
Dibromochloromethane	1.0 1.0		1.0 1.0	ug/L ug/L			04/13/22 17:14 04/13/22 17:14	1
DISTRICTION OFFICE II ALIE	1.0	J	1.0	ug/L			04/13/22 17.14	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	78		62 - 137		_		04/13/22 17:14	1
4-Bromofluorobenzene (Surr)	79		56 - 136				04/13/22 17:14	1
Tal			70 400				04/40/00 47:44	

Eurofins Canton

04/13/22 17:14

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Client: ZF Active Safety and Electronics LLC Job ID: 240-164831-1

Project/Site: TRW Milford

Date Received: 04/09/22 08:00

Client Sample ID: TRIP BLANK Lab Sample ID: 240-164831-4

Date Collected: 04/08/22 10:35 **Matrix: Water**

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

%Recovery Qualifier Limits Prepared Analyzed Dil Fac Dibromofluoromethane (Surr) 81 73 - 120 04/13/22 17:14

Surrogate Summary

Client: ZF Active Safety and Electronics LLC

Project/Site: TRW Milford

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water Prep Type: Total/NA

			Pe	ercent Surre	ogate Reco
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(62-137)	(56-136)	(78-122)	(73-120)
240-164831-1	OW-16D2_040822	75	79	85	88
240-164831-2	EQUIPMENT BLANK_040822	79	79	81	82
240-164831-3	FIELD BLANK_040822	76	79	84	81
240-164831-4	TRIP BLANK	78	79	82	81
LCS 240-522562/5	Lab Control Sample	74	86	80	87
MB 240-522562/8	Method Blank	78	80	83	84

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

DBFM = Dibromofluoromethane (Surr)

Eurofins Canton

Job ID: 240-164831-1

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Client: ZF Active Safety and Electronics LLC

Project/Site: TRW Milford

Job ID: 240-164831-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-522562/8

Matrix: Water

Analysis Batch: 522562

1,2-Dichloroethane-d4 (Surr)

Client Sample ID: Method Blank Prep Type: Total/NA

	MB	MB					
Analyte	Result	Qualifier	RL	Unit	D Prepared	Analyzed	Dil Fac
Acetone	10	U	10	ug/L		04/13/22 11:57	1
Benzene	1.0	U	1.0	ug/L		04/13/22 11:57	1
Bromodichloromethane	1.0	U	1.0	ug/L		04/13/22 11:57	1
Bromoform	1.0	U	1.0	ug/L		04/13/22 11:57	1
Bromomethane	1.0	U	1.0	ug/L		04/13/22 11:57	1
2-Butanone (MEK)	10	U	10	ug/L		04/13/22 11:57	1
Carbon disulfide	1.0	U	1.0	ug/L		04/13/22 11:57	1
Carbon tetrachloride	1.0	U	1.0	ug/L		04/13/22 11:57	1
Chlorobenzene	1.0	U	1.0	ug/L		04/13/22 11:57	1
Chloroethane	1.0	U	1.0	ug/L		04/13/22 11:57	1
Chloroform	1.0	U	1.0	ug/L		04/13/22 11:57	1
Chloromethane	1.0	U	1.0	ug/L		04/13/22 11:57	1
1,1-Dichloroethane	1.0	U	1.0	ug/L		04/13/22 11:57	1
1,2-Dichloroethane	1.0	U	1.0	ug/L		04/13/22 11:57	1
1,1-Dichloroethene	1.0	U	1.0	ug/L		04/13/22 11:57	1
1,2-Dichloropropane	1.0	U	1.0	ug/L		04/13/22 11:57	1
cis-1,3-Dichloropropene	1.0	U	1.0	ug/L		04/13/22 11:57	1
trans-1,3-Dichloropropene	1.0		1.0	ug/L		04/13/22 11:57	1
Ethylbenzene	1.0	U	1.0	ug/L		04/13/22 11:57	1
2-Hexanone	10		10	ug/L		04/13/22 11:57	1
Methylene Chloride	5.0	U	5.0	ug/L		04/13/22 11:57	1
4-Methyl-2-pentanone (MIBK)	10		10	ug/L		04/13/22 11:57	1
Styrene	1.0		1.0	ug/L		04/13/22 11:57	1
1,1,2,2-Tetrachloroethane	1.0		1.0	ug/L		04/13/22 11:57	1
Tetrachloroethene	1.0		1.0	ug/L		04/13/22 11:57	· · · · · · · 1
Toluene	1.0		1.0	ug/L		04/13/22 11:57	1
Trichloroethene	1.0		1.0	ug/L		04/13/22 11:57	1
Vinyl chloride	1.0		1.0	ug/L		04/13/22 11:57	· · · · · · · · · · · · · · · · · · ·
Xylenes, Total	2.0		2.0	ug/L		04/13/22 11:57	1
1,1,1-Trichloroethane	1.0		1.0	ug/L		04/13/22 11:57	1
1,1,2-Trichloroethane	1.0		1.0	ug/L		04/13/22 11:57	
1,2-Dibromo-3-Chloropropane	2.0		2.0			04/13/22 11:57	1
1.2-Dibromoethane	1.0		1.0	ug/L		04/13/22 11:57	1
Dichlorodifluoromethane	1.0		1.0	ug/L		04/13/22 11:57	1
cis-1,2-Dichloroethene	1.0		1.0	ug/L		04/13/22 11:57	1
-				ug/L			1
trans-1,2-Dichloroethene	1.0		1.0	ug/L		04/13/22 11:57	1
Isopropylbenzene	1.0		1.0	ug/L		04/13/22 11:57	1
Methyl tert-butyl ether	1.0		1.0	ug/L		04/13/22 11:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0		1.0	ug/L		04/13/22 11:57	
1,2,4-Trichlorobenzene	1.0		1.0	ug/L		04/13/22 11:57	1
1,2-Dichlorobenzene	1.0		1.0	ug/L		04/13/22 11:57	1
1,3-Dichlorobenzene	1.0		1.0	ug/L		04/13/22 11:57	
1,4-Dichlorobenzene	1.0		1.0	ug/L		04/13/22 11:57	1
Trichlorofluoromethane	1.0		1.0	ug/L		04/13/22 11:57	1
Dibromochloromethane	1.0	U	1.0	ug/L		04/13/22 11:57	1
	MB	MB					
Surrogate	%Recovery		Limits		Prepared	Analyzed	Dil Fac

Eurofins Canton

04/13/22 11:57

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Client: ZF Active Safety and Electronics LLC

Project/Site: TRW Milford

Job ID: 240-164831-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-522562/8

Matrix: Water

Analysis Batch: 522562

Client Sample ID: Method Blank

Prep Type: Total/NA

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	80		56 - 136		04/13/22 11:57	1
Toluene-d8 (Surr)	83		78 - 122		04/13/22 11:57	1
Dibromofluoromethane (Surr)	84		73 - 120		04/13/22 11:57	1

Lab Sample ID: LCS 240-522562/5

Matrix: Water

ne

Analysis Batch: 522562

Client Sample ID:	Lab Control Sample
	Prep Type: Total/NA

%Rac

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Acetone	40.0	28.8		ug/L		72	50 - 149	
Benzene	20.0	19.0		ug/L		95	77 - 123	
Bromodichloromethane	20.0	16.9		ug/L		84	69 - 126	
Bromoform	20.0	14.3		ug/L		72	57 - 129	
Bromomethane	20.0	18.0		ug/L		90	36 - 142	
2-Butanone (MEK)	40.0	29.3		ug/L		73	54 - 156	
Carbon disulfide	20.0	16.9		ug/L		84	43 - 140	
Carbon tetrachloride	20.0	18.3		ug/L		91	55 - 137	
Chlorobenzene	20.0	18.9		ug/L		95	80 - 121	
Chloroethane	20.0	17.3		ug/L		87	38 - 152	
Chloroform	20.0	18.4		ug/L		92	74 - 122	
Chloromethane	20.0	17.8		ug/L		89	47 - 143	
1,1-Dichloroethane	20.0	16.8		ug/L		84	72 - 127	
1,2-Dichloroethane	20.0	16.7		ug/L		84	66 - 128	
1,1-Dichloroethene	20.0	21.4		ug/L		107	63 - 134	
1,2-Dichloropropane	20.0	17.6		ug/L		88	75 - 133	
cis-1,3-Dichloropropene	20.0	16.9		ug/L		85	64 - 130	
trans-1,3-Dichloropropene	20.0	14.7		ug/L		73	57 - 129	
Ethylbenzene	20.0	18.4		ug/L		92	80 - 121	
2-Hexanone	40.0	27.0		ug/L		67	43 - 167	
Methylene Chloride	20.0	19.7		ug/L		98	71 - 125	
4-Methyl-2-pentanone (MIBK)	40.0	28.9		ug/L		72	46 - 158	
Styrene	20.0	17.9		ug/L		89	80 - 135	
1,1,2,2-Tetrachloroethane	20.0	17.6		ug/L		88	58 - 157	
Tetrachloroethene	20.0	19.2		ug/L		96	76 - 123	
Toluene	20.0	17.6		ug/L		88	80 - 123	
Trichloroethene	20.0	19.9		ug/L		100	70 - 122	
Vinyl chloride	20.0	18.8		ug/L		94	60 - 144	
Xylenes, Total	40.0	36.7		ug/L		92	80 - 121	
1,1,1-Trichloroethane	20.0	17.9		ug/L		90	64 - 131	
1,1,2-Trichloroethane	20.0	17.4		ug/L		87	70 - 138	
1,2-Dibromo-3-Chloropropane	20.0	13.3		ug/L		67	53 - 135	
1,2-Dibromoethane	20.0	17.6		ug/L		88	71 - 134	
Dichlorodifluoromethane	20.0	22.4		ug/L		112	34 - 153	
cis-1,2-Dichloroethene	20.0	19.6		ug/L		98	77 - 123	
trans-1,2-Dichloroethene	20.0	19.1		ug/L		96	75 - 124	
Isopropylbenzene	20.0	18.4		ug/L		92	74 - 128	
Methyl tert-butyl ether	20.0	16.7		ug/L		84	65 - 126	
1,1,2-Trichloro-1,2,2-trifluoroetha	20.0	21.5		ug/L		108	51 - 146	

Eurofins Canton

Client: ZF Active Safety and Electronics LLC

Project/Site: TRW Milford

Job ID: 240-164831-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-522562/5

Matrix: Water

Analysis Batch: 522562

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,2,4-Trichlorobenzene	20.0	17.2		ug/L		86	44 - 147	
1,2-Dichlorobenzene	20.0	19.1		ug/L		96	78 - 120	
1,3-Dichlorobenzene	20.0	18.2		ug/L		91	80 - 120	
1,4-Dichlorobenzene	20.0	18.4		ug/L		92	80 - 120	
Trichlorofluoromethane	20.0	20.1		ug/L		101	30 - 170	
Dibromochloromethane	20.0	15.8		ug/L		79	70 - 124	
m-Xylene & p-Xylene	20.0	18.3		ug/L		92	80 - 120	
o-Xylene	20.0	18.4		ug/L		92	80 - 123	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	74		62 - 137
4-Bromofluorobenzene (Surr)	86		56 ₋ 136
Toluene-d8 (Surr)	80		78 - 122
Dibromofluoromethane (Surr)	87		73 - 120

QC Association Summary

Client: ZF Active Safety and Electronics LLC Job ID: 240-164831-1

Project/Site: TRW Milford

GC/MS VOA

Analysis Batch: 522562

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-164831-1	OW-16D2_040822	Total/NA	Water	8260B	
240-164831-2	EQUIPMENT BLANK_040822	Total/NA	Water	8260B	
240-164831-3	FIELD BLANK_040822	Total/NA	Water	8260B	
240-164831-4	TRIP BLANK	Total/NA	Water	8260B	
MB 240-522562/8	Method Blank	Total/NA	Water	8260B	
LCS 240-522562/5	Lab Control Sample	Total/NA	Water	8260B	

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Lab Chronicle

Client: ZF Active Safety and Electronics LLC

Project/Site: TRW Milford

Client Sample ID: OW-16D2 040822

Lab Sample ID: 240-164831-1 Date Collected: 04/08/22 11:35

Matrix: Water

Matrix: Water

Job ID: 240-164831-1

Date Received: 04/09/22 08:00

Batch Dilution Batch Batch **Prepared** Method or Analyzed **Prep Type** Type Run **Factor** Number Analyst Lab Total/NA Analysis 8260B 522562 04/13/22 15:59 LEE TAL CAN

Client Sample ID: EQUIPMENT BLANK 040822

Lab Sample ID: 240-164831-2

Date Collected: 04/08/22 11:50 Date Received: 04/09/22 08:00

Batch Batch Dilution **Batch** Prepared **Prep Type** Type Method Run Factor Number or Analyzed Analyst Lab Total/NA Analysis 8260B 522562 04/13/22 16:24 LEE TAL CAN

Client Sample ID: FIELD BLANK_040822

Lab Sample ID: 240-164831-3 Date Collected: 04/08/22 10:35

Matrix: Water

Date Received: 04/09/22 08:00

Batch Batch Dilution Batch **Prepared Prep Type** Method **Factor** Number or Analyzed Type Run Analyst Lab TAL CAN Total/NA Analysis 8260B 522562 04/13/22 16:49 LEE

Client Sample ID: TRIP BLANK Lab Sample ID: 240-164831-4

Date Collected: 04/08/22 10:35 **Matrix: Water**

Date Received: 04/09/22 08:00

Batch **Batch** Dilution Batch **Prepared Prep Type** Method Run Factor Number or Analyzed Analyst Type Lab Analysis 8260B 522562 04/13/22 17:14 LEE TAL CAN Total/NA

Laboratory References:

TAL CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: ZF Active Safety and Electronics LLC

Project/Site: TRW Milford

Job ID: 240-164831-1

Laboratory: Eurofins Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date		
California	State	2927	02-27-23		
Connecticut	State	PH-0590	12-31-23		
Florida	NELAP	E87225	06-30-22		
Georgia	State	4062	02-23-22 *		
Illinois	NELAP	200004	07-31-22		
lowa	State	421	06-01-23		
Kansas	NELAP	E-10336	04-30-22		
Kentucky (UST)	State	112225	02-23-22 *		
Kentucky (WW)	State	KY98016	12-31-22		
Minnesota	NELAP	039-999-348	12-31-22		
Minnesota (Petrofund)	State	3506	08-01-23		
New Jersey	NELAP	OH001	11-06-22		
New York	NELAP	10975	04-01-23		
Ohio	State	8303	02-23-23		
Ohio VAP	State	CL0024	02-27-23		
Oregon	NELAP	4062	02-27-23		
Pennsylvania	NELAP	68-00340	08-31-22		
Texas	NELAP	T104704517-22-16	08-31-22		
Virginia	NELAP	11570	09-14-22		
Washington	State	C971	01-12-23		
West Virginia DEP	State	210	12-31-22		

 $^{^{\}star} \ \text{Accreditation/Certification renewal pending - accreditation/certification considered valid}.$

Eurofins Canton

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Date Time

Preservatives Code: 0 = None; 1 = HCL; 2 = HNO3; 3 = H2SO4; 4 = NaOH; 5 = Zn. Acetate; 6 = MeOH; 7 = NaHSO4; 8 = Other (specify)

STI, North Canton 4 (01 Shuffel Dave NW North Canton, OH 44720					Chain Of Custody / Analysis Request										LAB USE ONL Laboratory ID No. (Lot N							
Attn Michael DelMorree					Privileged & Co	ofidential		Yes			Site Name: Milford											
Project Type: Groundwater Sampling - IZ				npling - IZ	TRW PO No.	30046730 0000	Z				Site Location: Minima Michigan											
11	VPM: (name, company, address,	(lizm~			Database Mana	ger: (name, comp	any, addres	s, E-mail)						P	eservati	ves Cod	e (see h	etow)				
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were further preserved in the laboratory.

Preservative(s) added/Lot number(s):

20. SAMPLE PRESERVATION

VOA Sample Preservation - Date/Time VOAs Frozen:

Sample(s)

Time preserved:

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Environment Testing America

ANALYTICAL REPORT

Eurofins Canton 180 S. Van Buren Avenue Barberton, OH 44203 Tel: (330)497-9396

Laboratory Job ID: 240-165203-1

Client Project/Site: Milford

For:

ZF Active Safety and Electronics LLC Tech 2 12025 Tech Center Drive Livonia, Michigan 48150

Attn: Scott Detwiler

Ade Del Your

Authorized for release by: 4/26/2022 9:29:11 AM

Michael DelMonico, Project Manager I (330)497-9396

Michael.DelMonico@et.eurofinsus.com

LINKS

Review your project results through

Total Access

Have a Question?



Visit us at:

www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Cover Page	1
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Definitions/Glossary

Client: ZF Active Safety and Electronics LLC

Job ID: 240-165203-1 Project/Site: Milford

Qualifiers

GC/MS VOA

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.

Listed under the "D" column to designate that the result is reported on a dry weight basis

Percent Recovery %R **CFL** Contains Free Liquid CFU Colony Forming Unit CNF Contains No Free Liquid

Duplicate Error Ratio (normalized absolute difference) **DER**

Dil Fac **Dilution Factor**

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

Estimated Detection Limit (Dioxin) **EDL** LOD Limit of Detection (DoD/DOE) LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level" MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit MLMinimum Level (Dioxin) MPN Most Probable Number Method Quantitation Limit MQL

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive QC **Quality Control**

Relative Error Ratio (Radiochemistry) **RER**

Reporting Limit or Requested Limit (Radiochemistry) RL

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin) **TEQ** Toxicity Equivalent Quotient (Dioxin)

Too Numerous To Count **TNTC**

Case Narrative

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Job ID: 240-165203-1

Job ID: 240-165203-1

Laboratory: Eurofins Canton

Narrative

Job Narrative 240-165203-1

Comments

No additional comments.

Receipt

The samples were received on 4/19/2022 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.5° C.

GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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Method Summary

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Job ID: 240-165203-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
5030B	Purge and Trap	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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Sample Summary

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Lab Sample ID Client Sample ID Matrix Collected Received 240-165203-1 OW-16D2_041822 Water 04/18/22 10:55 04/19/22 10:00 240-165203-2 EQUIPMENT BLANK_041822 Water 04/18/22 11:20 04/19/22 10:00 FIELD BLANK_041822 Water 04/18/22 10:35 04/19/22 10:00 240-165203-3 TRIP BLANK 04/18/22 00:00 04/19/22 10:00 240-165203-4 Water

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Job ID: 240-165203-1

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Detection Summary

Client: ZF Active Safety and Electronics LLC Job ID: 240-165203-1

Project/Site: Milford

Client Sample ID: OW-16D2	_041822	Lab Sample ID: 240-165203-1

Analyte	Result Qualifier	RL	Unit	Dil Fac) Method	Prep Type
1,1-Dichloroethane	2.4	1.0	ug/L		8260B	Total/NA
cis-1,2-Dichloroethene	16	1.0	ug/L	1	8260B	Total/NA
trans-1,2-Dichloroethene	1.2	1.0	ug/L	1	8260B	Total/NA

Client Sample ID: EQUIPMENT BLANK 041822	Lab Sample ID: 240-165203-2
Choin Campic ID: Egon MEITI DEMINI CTICEE	

No Detections.

Client Sample ID: FIELD BLANK_041822 Lab Sample ID: 240-165203-3

No Detections.

Client Sample ID: TRIP BLANK Lab Sample ID: 240-165203-4

No Detections.

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Toluene-d8 (Surr)

Client Sample ID: OW-16D2_041822

Date Collected: 04/18/22 10:55 Date Received: 04/19/22 10:00 Job ID: 240-165203-1

Lab Sample ID: 240-165203-1

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	ug/L			04/21/22 15:37	1
Benzene	1.0	U	1.0	ug/L			04/21/22 15:37	1
Bromodichloromethane	1.0	U	1.0	ug/L			04/21/22 15:37	1
Bromoform	1.0	U	1.0	ug/L			04/21/22 15:37	1
Bromomethane	1.0	U	1.0	ug/L			04/21/22 15:37	1
2-Butanone (MEK)	10	U	10	ug/L			04/21/22 15:37	1
Carbon disulfide	1.0	U	1.0	ug/L			04/21/22 15:37	1
Carbon tetrachloride	1.0	U	1.0	ug/L			04/21/22 15:37	1
Chlorobenzene	1.0	U	1.0	ug/L			04/21/22 15:37	1
Chloroethane	1.0	U	1.0	ug/L			04/21/22 15:37	1
Chloroform	1.0	U	1.0	ug/L			04/21/22 15:37	1
Chloromethane	1.0	U	1.0	ug/L			04/21/22 15:37	1
1,1-Dichloroethane	2.4		1.0	ug/L			04/21/22 15:37	1
1,2-Dichloroethane	1.0	U	1.0	ug/L			04/21/22 15:37	1
1,1-Dichloroethene	1.0		1.0	ug/L			04/21/22 15:37	1
1,2-Dichloropropane	1.0		1.0	ug/L			04/21/22 15:37	1
cis-1,3-Dichloropropene	1.0		1.0	ug/L			04/21/22 15:37	1
trans-1,3-Dichloropropene	1.0		1.0	ug/L			04/21/22 15:37	1
Ethylbenzene	1.0		1.0	ug/L			04/21/22 15:37	1
2-Hexanone	10		10	ug/L			04/21/22 15:37	1
Methylene Chloride	5.0		5.0	ug/L			04/21/22 15:37	1
4-Methyl-2-pentanone (MIBK)	10		10	ug/L			04/21/22 15:37	
Styrene	1.0		1.0	ug/L			04/21/22 15:37	1
1,1,2,2-Tetrachloroethane	1.0		1.0	ug/L			04/21/22 15:37	1
Tetrachloroethene	1.0		1.0	ug/L			04/21/22 15:37	' 1
Toluene	1.0		1.0	ug/L			04/21/22 15:37	1
Trichloroethene	1.0		1.0	ug/L			04/21/22 15:37	1
Vinyl chloride	1.0		1.0	ug/L			04/21/22 15:37	 1
Xylenes, Total	2.0		2.0	ug/L			04/21/22 15:37	1
1,1,1-Trichloroethane	1.0		1.0	ug/L			04/21/22 15:37	1
1,1,2-Trichloroethane	1.0		1.0				04/21/22 15:37	 1
1,2-Dibromo-3-Chloropropane	2.0		2.0	ug/L ug/L			04/21/22 15:37	1
1,2-Dibromoethane	1.0		1.0	•			04/21/22 15:37	
Dichlorodifluoromethane				ug/L				
	1.0	U	1.0	ug/L			04/21/22 15:37 04/21/22 15:37	1
cis-1,2-Dichloroethene	16		1.0	ug/L			04/21/22 15:37	1
trans-1,2-Dichloroethene	1.2		1.0	ug/L				ا 1
Isopropylbenzene	1.0		1.0	ug/L			04/21/22 15:37	1
Methyl tert-butyl ether	1.0		1.0	ug/L			04/21/22 15:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0		1.0	ug/L			04/21/22 15:37	
1,2,4-Trichlorobenzene	1.0		1.0	ug/L			04/21/22 15:37	1
1,2-Dichlorobenzene	1.0		1.0	ug/L			04/21/22 15:37	1
1,3-Dichlarahanana	1.0		1.0	ug/L			04/21/22 15:37	1
1,4-Dichlorobenzene	1.0		1.0	ug/L			04/21/22 15:37	1
Trichlorofluoromethane	1.0		1.0	ug/L			04/21/22 15:37	1
Dibromochloromethane	1.0	U	1.0	ug/L			04/21/22 15:37	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	76		62 - 137		_		04/21/22 15:37	1
4-Bromofluorobenzene (Surr)	78		56 - 136				04/21/22 15:37	1
Tal			70 400				04/04/00 45:07	-

Eurofins Canton

04/21/22 15:37

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4/26/2022

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Client: ZF Active Safety and Electronics LLC

Job ID: 240-165203-1

Project/Site: Milford

Date Collected: 04/18/22 10:55 East Stample 15: 240 166266-1

Date Received: 04/19/22 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

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Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Client Sample ID: EQUIPMENT BLANK_041822

Date Collected: 04/18/22 11:20 Date Received: 04/19/22 10:00

4-Bromofluorobenzene (Surr)

Toluene-d8 (Surr)

Lab Sample ID: 240-165203-2

Matrix: Water

Job ID: 240-165203-1

Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Acetone	10	U	10	ug/L			04/21/22 16:02	
Benzene	1.0	U	1.0	ug/L			04/21/22 16:02	
Bromodichloromethane	1.0	U	1.0	ug/L			04/21/22 16:02	
Bromoform	1.0	U	1.0	ug/L			04/21/22 16:02	
Bromomethane	1.0	U	1.0	ug/L			04/21/22 16:02	
2-Butanone (MEK)	10	U	10	ug/L			04/21/22 16:02	
Carbon disulfide	1.0	U	1.0	ug/L			04/21/22 16:02	
Carbon tetrachloride	1.0	U	1.0	ug/L			04/21/22 16:02	
Chlorobenzene	1.0	U	1.0	ug/L			04/21/22 16:02	
Chloroethane	1.0	U	1.0	ug/L			04/21/22 16:02	
Chloroform	1.0	U	1.0	ug/L			04/21/22 16:02	
Chloromethane	1.0	U	1.0	ug/L			04/21/22 16:02	
1,1-Dichloroethane	1.0	U	1.0	ug/L			04/21/22 16:02	
1,2-Dichloroethane	1.0		1.0	ug/L			04/21/22 16:02	
1,1-Dichloroethene	1.0		1.0	ug/L			04/21/22 16:02	
1,2-Dichloropropane	1.0		1.0	ug/L			04/21/22 16:02	
cis-1,3-Dichloropropene	1.0		1.0	ug/L			04/21/22 16:02	
trans-1,3-Dichloropropene	1.0		1.0	ug/L			04/21/22 16:02	
Ethylbenzene	1.0		1.0	ug/L			04/21/22 16:02	
2-Hexanone	10		10	ug/L			04/21/22 16:02	
Methylene Chloride	5.0		5.0	ug/L			04/21/22 16:02	
4-Methyl-2-pentanone (MIBK)			10	ug/L			04/21/22 16:02	
Styrene	1.0		1.0	ug/L			04/21/22 16:02	
1,1,2,2-Tetrachloroethane	1.0		1.0	ug/L			04/21/22 16:02	
Tetrachloroethene	1.0		1.0	ug/L			04/21/22 16:02	
Foluene	1.0		1.0	•			04/21/22 16:02	
Trichloroethene	1.0		1.0	ug/L			04/21/22 16:02	
				ug/L				
Vinyl chloride	1.0 2.0		1.0	ug/L			04/21/22 16:02 04/21/22 16:02	
Xylenes, Total	1.0		2.0	ug/L				
1,1,1-Trichloroethane			1.0	ug/L			04/21/22 16:02	
1,1,2-Trichloroethane	1.0		1.0	ug/L			04/21/22 16:02	
1,2-Dibromo-3-Chloropropane	2.0		2.0	ug/L			04/21/22 16:02	
1,2-Dibromoethane	1.0		1.0	ug/L			04/21/22 16:02	
Dichlorodifluoromethane	1.0		1.0	ug/L			04/21/22 16:02	
cis-1,2-Dichloroethene	1.0		1.0	ug/L			04/21/22 16:02	
trans-1,2-Dichloroethene	1.0		1.0	ug/L			04/21/22 16:02	
Isopropylbenzene	1.0		1.0	ug/L			04/21/22 16:02	
Methyl tert-butyl ether	1.0		1.0	ug/L			04/21/22 16:02	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0		1.0	ug/L			04/21/22 16:02	
1,2,4-Trichlorobenzene	1.0		1.0	ug/L			04/21/22 16:02	
1,2-Dichlorobenzene	1.0		1.0	ug/L			04/21/22 16:02	
1,3-Dichlorobenzene	1.0		1.0	ug/L			04/21/22 16:02	
1,4-Dichlorobenzene	1.0		1.0	ug/L			04/21/22 16:02	
Trichlorofluoromethane	1.0		1.0	ug/L			04/21/22 16:02	
Dibromochloromethane	1.0	U	1.0	ug/L			04/21/22 16:02	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4 (Surr)	77		62 - 137		•		04/21/22 16:02	

Eurofins Canton

04/21/22 16:02

04/21/22 16:02

56 - 136

78 - 122

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Client: ZF Active Safety and Electronics LLC Job ID: 240-165203-1

Project/Site: Milford

Date Received: 04/19/22 10:00

Client Sample ID: EQUIPMENT BLANK_041822 Lab Sample ID: 240-165203-2

Date Collected: 04/18/22 11:20

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

%Recovery Qualifier Limits Prepared Analyzed Dil Fac Dibromofluoromethane (Surr) 88 73 - 120 04/21/22 16:02

Client: ZF Active Safety and Electronics LLC Job ID: 240-165203-1

Project/Site: Milford

1,2-Dichloroethane-d4 (Surr)

4-Bromofluorobenzene (Surr)

Toluene-d8 (Surr)

Client Sample ID: FIELD BLANK_041822

Lab Sample ID: 240-165203-3 Date Collected: 04/18/22 10:35 Date Received: 04/19/22 10:00

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Acetone 10 U 10 ugL 04/21/22 16.2 Bromodichloromethane 1.0 U 1.0 ugl. 04/21/22 16.2 Bromoform 1.0 U 1.0 ugl. 04/21/22 16.2 Bromoform 1.0 U 1.0 ugl. 04/21/22 16.2 2-Butanoe (MEK) 10 U 1.0 ugl. 04/21/22 16.2 Carbon Isulfade 1.0 U 1.0 ugl. 04/21/22 16.2 Carbon Isulfade 1.0 U 1.0 ugl. 04/21/22 16.2 Chicroberane 1.0 U 1.0 ugl. 04/21/22 16.2 Chicroberane 1.0 U 1.0 ugl. 04/21/22 16.2 Chicroberm 1.0 U 1.0 ugl. 04/21/22 16.2 Chicroberm 1.0 U 1.0 ugl. 04/21/22 16.2 Chicrobermane 1.0 U 1.0 ugl. 04/21/22 16.2 1,1-Dichloroethane 1.0 U	Dil Fac
Bromodichloromethane	27 1
Bromoform 1.0 U 1.0 ug/L 04/21/22 16:2 Bromomethane 1.0 U 1.0 ug/L 04/21/22 16:2 Bromomethane 1.0 U 1.0 ug/L 04/21/22 16:2 Carbon tetrachloride 1.0 U 1.0 ug/L 04/21/22 16:2 Carbon disulfide 1.0 U 1.0 ug/L 04/21/22 16:2 Carbon tetrachloride 1.0 U 1.0 ug/L 04/21/22 16:2 Chlorochenzene 1.0 U 1.0 ug/L 04/21/22 16:2 Chlorochenzene 1.0 U 1.0 ug/L 04/21/22 16:2 Chlorochane 1.0 U 1.0 ug/L 04/21/22 16:2 Chlorochane 1.0 U 1.0 ug/L 04/21/22 16:2 Chloromethane 1.0 U 1.0 ug/L 04/21/22 16:2 Chlorochene 1.0 U 1.0 ug/L 04/21/22 16:2	27 1
Bromomethane 1.0 U 1.0 ug/L 04/21/22 16:2 2-Butanone (MEK) 10 U 10 ug/L 04/21/22 16:2 Carbon disulfide 1.0 U 1.0 ug/L 04/21/22 16:2 Carbon tetrachloride 1.0 U 1.0 ug/L 04/21/22 16:2 Carbon tetrachloride 1.0 U 1.0 ug/L 04/21/22 16:2 Chlorobenzene 1.0 U 1.0 ug/L 04/21/22 16:2 Chlorobenzene 1.0 U 1.0 ug/L 04/21/22 16:2 Chlorocethane 1.0 U 1.0 ug/L 04/21/22 16:2 Chlorocethane 1.0 U 1.0 ug/L 04/21/22 16:2 Chlorocethane 1.0 U 1.0 ug/L 04/21/22 16:2 1.1-Dichlorocethane 1.0 U 1.0 ug/L 04/21/22 16:2 1.1-Dichlorocethane 1.0 U 1.0 ug/L 04/21/22 16:2 1.1-Dichlorocethane 1.0 U 1.0 ug/L 04/21/22 16:2 1.2-Dichloropethane 1.0 U 1.0 ug/L 04/21/22 16:2 1.2-Dichloropethane 1.0 U 1.0 ug/L 04/21/22 16:2 1.2-Dichloropethane 1.0 U 1.0 ug/L 04/21/22 16:2 1.2-Dichloropropene 1.0 U 1.0 ug/L 04/21/22 16:2 1.1-Dichloropropene 1.0 U 1.0 ug/L 04/21/22 16:2 1.1-Dichloropenene 1.0 U 1.0 ug/L 04/21/22 16:2 1.1-Dichloropenene 1.0 U 1.0 ug/	27 1
2-Butanone (MEK)	27 1
Carbon disulfide	27 1
Carbon tetrachloride	27 1
Chlorobenzene 1.0 U 1.0 ug/L 04/21/22 16:2 Chlorotethane 1.0 U 1.0 ug/L 04/21/22 16:2 Chlorotethane 1.0 U 1.0 ug/L 04/21/22 16:2 Chloromethane 1.0 U 1.0 ug/L 04/21/22 16:2 1,1-Dichlorotethane 1.0 U 1.0 ug/L 04/21/22 16:2 1,1-Dichlorotethane 1.0 U 1.0 ug/L 04/21/22 16:2 1,1-Dichloropenane 1.0 U 1.0 ug/L 04/21/22 16:2 1,1-Dichloropen	27 1
Chloroethane	27 1
Chloroethane	27 1
Chloroform 1.0 U 1.0 ug/L 04/21/22 16:2 Chloromethane 1.0 U 1.0 ug/L 04/21/22 16:2 Chloromethane 1.0 U 1.0 ug/L 04/21/22 16:2 1,2-Dichloroethane 1.0 U 1.0 ug/L 04/21/22 16:2 1,2-Dichloroethane 1.0 U 1.0 ug/L 04/21/22 16:2 1,1-Dichloroethane 1.0 U 1.0 ug/L 04/21/22 16:2 1,1-Dichloropropane 1.0 U 1.0 ug/L 04/21/22 16:3 1,3-Dichloropropane 1.0 U 1.0 ug/L 04/21/22 16:3 1-3-Dichloropropene 1.0 U 1.0 ug/L 04/21/22 16:3 1-2-Hexanone 1.0 U 1.0 ug/L 04/21/22 16:3 1-1,1-2-Trichloroethane 1.0 U 1.0 ug/L 04/21/22 16:3 1-1,1-2-Trichloroethane 1.0 U 1.0 ug/L 04/21/22 16:3 1-1,1-Trichloroethane 1.0 U 1.0 ug/L 04/21/22 16:3 1-1,2-Trichloroethane 1.0 U 1.0 ug/L 04/21/22 16:3 1-1,2-Trichloroethane 1.0 U 1.0 ug/L 04/21/22 16:3 1-1,2-Trichloroethane 1.0 U 1.0 ug/L 04/21/22 16:3 1-1,2-Dichloroethane 1.0 U 1.0 ug/L 04/21/22 16:3 1-1,2-Trichloroethane 1.0 U 1.0 ug/L 04/21/2	27 1
Chloromethane 1.0 U 1.0 ug/L 04/21/22 16:2 1,1-Dichloroethane 1.0 U 1.0 ug/L 04/21/22 16:2 1,1-Dichloroptopane 1.0 U 1.0 ug/L 04/21/22 16:2 1,2-Dichloropropane 1.0 U 1.0 ug/L 04/21/22 16:2 1,2-Dichloropropane 1.0 U 1.0 ug/L 04/21/22 16:2 1,1-Dichloropropane 1.0 U 1.0 ug/L 04/21/22 16:2 1,2-Dibromo-3-Chloropropane 1.0 U 1.0 ug/L 04/21/22 16:2 1,1-Dichloropropane 1.0 U 1.0 ug/L 04/21/22 16:2 1,1-Dichloropropane 1.0 U 1.0 ug/L 04/21/22 16:2 1,2-Dichloropropane 1.0 U 1.0 ug/L 04/21/22 16:2 1,2-Dichloropropane 1.0 U 1.0 ug/L 04/21/22 16:2 1,2-Dichloropropane 1.0 U 1.0 ug/L 04/2	27 1
1,1-Dichloroethane	27 1
1,2-Dichloroethane 1.0 U 1.0 ug/L 04/21/22 16:2 1,1-Dichloroethene 1.0 U 1.0 ug/L 04/21/22 16:2 cis-1,3-Dichloropropene 1.0 U 1.0 ug/L 04/21/22 16:2 cis-1,3-Dichloropropene 1.0 U 1.0 ug/L 04/21/22 16:2 Ethylbenzene 1.0 U 1.0 ug/L 04/21/22 16:2 Ethylbenzene 1.0 U 1.0 ug/L 04/21/22 16:2 Hethylene Chloride 5.0 U 5.0 ug/L 04/21/22 16:2 4-Methyl-2-pentanone (MIBK) 10 U 1.0 ug/L 04/21/22 16:2 5tyrene 1.0 U 1.0 ug/L 04/21/22 16:2 5tyrene 1.0 U 1.0 ug/L 04/21/22 16:2 Tetrachloroethane 1.0 U 1.0 ug/L 04/21/22 16:2 Trichloroethane 1.0 U 1.0 ug/L 04/21/22 16:2 Vylng chloride 1.0 U 1.0 ug/L 04/21/22 16:2 <t< td=""><td>27 1</td></t<>	27 1
1,1-Dichloroethene 1.0 U 1.0 ug/L 04/21/22 16:2 1,2-Dichloropropane 1.0 U 1.0 ug/L 04/21/22 16:2 1:s-1,3-Dichloropropene 1.0 U 1.0 ug/L 04/21/22 16:2 trans-1,3-Dichloropropene 1.0 U 1.0 ug/L 04/21/22 16:2 Ethylbenzene 1.0 U 1.0 ug/L 04/21/22 16:2 2-Hexanone 10 U 1.0 ug/L 04/21/22 16:2 4-Methyl-2-pentanone (MIBK) 10 U 1.0 ug/L 04/21/22 16:2 4-Methyl-2-pentanone (MIBK) 10 U 1.0 ug/L 04/21/22 16:2 Styrene 1.0 U 1.0 ug/L 04/21/22 16:2 Styrene 1.0 U 1.0 ug/L 04/21/22 16:2 Tetrachloroethene 1.0 U 1.0 ug/L 04/21/22 16:2 Tolluene 1.0 U 1.0 ug/L 04/21/22 16:2 Tichloroethene 1.0 U 1.0 ug/L 04/21/22 16:2 <	
1,2-Dichloropropane 1.0 U 1.0 ug/L 04/21/22 16:2 6:3-1,3-Dichloropropene 1.0 U 1.0 ug/L 04/21/22 16:2 6:2-1,3-Dichloropropene 1.0 U 1.0 ug/L 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:2 04/21/22 16:	
1.0 U	
trans-1,3-Dichloropropene 1.0 U 1.0 ug/L 04/21/22 16:2 Ethylbenzene 1.0 U 1.0 ug/L 04/21/22 16:2 Ethylbenzene 1.0 U 1.0 ug/L 04/21/22 16:2 Methylene Chloride 5.0 U 5.0 ug/L 04/21/22 16:2 Methylene Chloride 5.0 U 5.0 ug/L 04/21/22 16:2 Styrene 1.0 U 1.0 ug/L 04/21/22 16:2 Tetrachloroethane 1.0 U 1.0 ug/L 04/21/22 16:2 Trichloroethene 1.0 U 1.0 ug/L 04/21/22 16:2 Trichloroethane 1.0 U 1.0 ug/L 04/21/22 16:2 Dichlorodifluoromethane 1.0 U 1.0 ug/L 04/21/22 16:2 Dichlorodenzene 1.0 U 1.0 ug/L 04/21/22 16:2 Dichlorodenzene 1.0 U 1.0 ug/L 04/21/22 16:2 Dichlorodenzene 1.0 U 1.0 ug/L 04/21/22 16:2 Dichlorobenzene 1.0 U 1.0 ug/L 04/21/22 16:2 Dichlorobenzene 1.0 U 1.0 ug/L 04/21/22 16:2 Dichlorobenzene 1.0 U 1.0 ug/L 04/21/22 16:2	
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	27 1
Surrogate %Recovery Qualifier Limits Prepared Analyzed	

Eurofins Canton

04/21/22 16:27

04/21/22 16:27

62 - 137

56 - 136

78 - 122

76

80

85

04/21/22 16:27

Client: ZF Active Safety and Electronics LLC Job ID: 240-165203-1

Project/Site: Milford

Date Received: 04/19/22 10:00

Client Sample ID: FIELD BLANK_041822 Lab Sample ID: 240-165203-3

Date Collected: 04/18/22 10:35

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

%Recovery Qualifier Limits Prepared Analyzed Dil Fac Dibromofluoromethane (Surr) 88 73 - 120 04/21/22 16:27

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Client Sample ID: TRIP BLANK

Date Collected: 04/18/22 00:00 Date Received: 04/19/22 10:00

4-Bromofluorobenzene (Surr)

Toluene-d8 (Surr)

Lab Sample ID: 240-165203-4

Matrix: Water

Job ID: 240-165203-1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	ug/L		-	04/21/22 16:52	1
Benzene	1.0	U	1.0	ug/L			04/21/22 16:52	1
Bromodichloromethane	1.0	U	1.0	ug/L			04/21/22 16:52	1
Bromoform	1.0	U	1.0	ug/L			04/21/22 16:52	1
Bromomethane	1.0	U	1.0	ug/L			04/21/22 16:52	1
2-Butanone (MEK)	10	U	10	ug/L			04/21/22 16:52	1
Carbon disulfide	1.0	U	1.0	ug/L			04/21/22 16:52	1
Carbon tetrachloride	1.0	U	1.0	ug/L			04/21/22 16:52	1
Chlorobenzene	1.0	U	1.0	ug/L			04/21/22 16:52	1
Chloroethane	1.0	U	1.0	ug/L			04/21/22 16:52	1
Chloroform	1.0	U	1.0	ug/L			04/21/22 16:52	1
Chloromethane	1.0	U	1.0	ug/L			04/21/22 16:52	1
1,1-Dichloroethane	1.0		1.0	ug/L			04/21/22 16:52	1
1,2-Dichloroethane	1.0		1.0	ug/L			04/21/22 16:52	1
1,1-Dichloroethene	1.0		1.0	ug/L			04/21/22 16:52	1
1,2-Dichloropropane	1.0		1.0	ug/L			04/21/22 16:52	1
cis-1,3-Dichloropropene	1.0		1.0	ug/L			04/21/22 16:52	1
trans-1,3-Dichloropropene	1.0		1.0	ug/L			04/21/22 16:52	1
Ethylbenzene	1.0		1.0	ug/L			04/21/22 16:52	1
2-Hexanone	10		10	ug/L			04/21/22 16:52	1
Methylene Chloride	5.0		5.0	ug/L			04/21/22 16:52	1
4-Methyl-2-pentanone (MIBK)	10		10	ug/L			04/21/22 16:52	· · · · · · · · · · · · · · · · · · ·
Styrene	1.0		1.0	ug/L			04/21/22 16:52	1
1,1,2,2-Tetrachloroethane	1.0		1.0	ug/L			04/21/22 16:52	1
Tetrachloroethene	1.0		1.0	ug/L			04/21/22 16:52	· · · · · · · · · · · · · · · · · · ·
Toluene	1.0		1.0	ug/L			04/21/22 16:52	1
Trichloroethene	1.0		1.0	ug/L			04/21/22 16:52	1
Vinyl chloride	1.0		1.0	ug/L			04/21/22 16:52	· 1
Xylenes, Total	2.0		2.0	ug/L			04/21/22 16:52	1
1,1,1-Trichloroethane	1.0		1.0	ug/L			04/21/22 16:52	1
1,1,2-Trichloroethane	1.0		1.0	ug/L			04/21/22 16:52	· · · · · · · · · · · · · · · · · · ·
1,2-Dibromo-3-Chloropropane	2.0		2.0	ug/L			04/21/22 16:52	1
1,2-Dibromoethane	1.0		1.0	ug/L			04/21/22 16:52	1
Dichlorodifluoromethane	1.0		1.0	ug/L			04/21/22 16:52	 1
cis-1,2-Dichloroethene	1.0		1.0	ug/L			04/21/22 16:52	1
trans-1,2-Dichloroethene	1.0		1.0	ug/L			04/21/22 16:52	1
Isopropylbenzene	1.0		1.0	ug/L			04/21/22 16:52	
Methyl tert-butyl ether	1.0		1.0				04/21/22 16:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0		1.0	ug/L ug/L			04/21/22 16:52	1
1,2,4-Trichlorobenzene	1.0		1.0	ug/L			04/21/22 16:52	' 1
	1.0		1.0				04/21/22 16:52	
1,2-Dichlorobenzene 1,3-Dichlorobenzene	1.0		1.0	ug/L ug/L			04/21/22 16:52	1
1,4-Dichlorobenzene Trichlorofluoromethane	1.0		1.0	ug/L			04/21/22 16:52	1
Trichlorofluoromethane Dibromochloromethane	1.0		1.0	ug/L			04/21/22 16:52	1
Dibiomocnioromethane	1.0	U	1.0	ug/L			04/21/22 16:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	74	****	62 - 137		-	-1	04/21/22 16:52	1
			50 100				0.4/0.4/0.0 4.0 5.0	

Eurofins Canton

04/21/22 16:52

04/21/22 16:52

Page 14 of 24

56 - 136

78 - 122

79

82

4/26/2022

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Client: ZF Active Safety and Electronics LLC Job ID: 240-165203-1

Project/Site: Milford

Client Sample ID: TRIP BLANK Lab Sample ID: 240-165203-4

Date Collected: 04/18/22 00:00 East Sample 15: 240-103203-4

Date Received: 04/19/22 10:00 Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

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Surrogate Summary

Client: ZF Active Safety and Electronics LLC Job ID: 240-165203-1

Project/Site: Milford

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water Prep Type: Total/NA

0-165203-1 OW-16D2_041822 76 78 82 91 0-165203-2 EQUIPMENT BLANK_041822 77 82 82 88 0-165203-3 FIELD BLANK_041822 76 80 85 88				Pe	ercent Surre	ogate Reco
0-165203-1 OW-16D2_041822 76 78 82 91 0-165203-2 EQUIPMENT BLANK_041822 77 82 82 88 0-165203-3 FIELD BLANK_041822 76 80 85 88			DCA	BFB	TOL	DBFM
0-165203-2 EQUIPMENT BLANK_041822 77 82 82 88 0-165203-3 FIELD BLANK_041822 76 80 85 88	Lab Sample ID	Client Sample ID	(62-137)	(56-136)	(78-122)	(73-120)
0-165203-3 FIELD BLANK_041822 76 80 85 88	240-165203-1	OW-16D2_041822	76	78	82	91
	240-165203-2	EQUIPMENT BLANK_041822	77	82	82	88
	240-165203-3	FIELD BLANK_041822	76	80	85	88
0-165203-4 TRIP BLANK 74 79 82 86	240-165203-4	TRIP BLANK	74	79	82	86
S 240-523444/5 Lab Control Sample 73 86 81 90	LCS 240-523444/5	Lab Control Sample	73	86	81	90
3 240-523444/8 Method Blank 78 78 81 89	MB 240-523444/8	Method Blank	78	78	81	89

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

DBFM = Dibromofluoromethane (Surr)

Eurofins Canton

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QC Sample Results

Client: ZF Active Safety and Electronics LLC

Job ID: 240-165203-1

Project/Site: Milford

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-523444/8

Matrix: Water

Surrogate

1,2-Dichloroethane-d4 (Surr)

Client Sample ID: Method Blank Prep Type: Total/NA

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Acetone	10	U	10	ug/L			04/21/22 11:01	
Benzene	1.0	U	1.0	ug/L			04/21/22 11:01	
Bromodichloromethane	1.0	U	1.0	ug/L			04/21/22 11:01	
Bromoform	1.0	U	1.0	ug/L			04/21/22 11:01	
Bromomethane	1.0	U	1.0	ug/L			04/21/22 11:01	
2-Butanone (MEK)	10	U	10	ug/L			04/21/22 11:01	
Carbon disulfide	1.0	U	1.0	ug/L			04/21/22 11:01	
Carbon tetrachloride	1.0	U	1.0	ug/L			04/21/22 11:01	
Chlorobenzene	1.0	U	1.0	ug/L			04/21/22 11:01	
Chloroethane	1.0	U	1.0	ug/L			04/21/22 11:01	
Chloroform	1.0	U	1.0	ug/L			04/21/22 11:01	
Chloromethane	1.0	U	1.0	ug/L			04/21/22 11:01	
1,1-Dichloroethane	1.0	U	1.0	ug/L			04/21/22 11:01	
1,2-Dichloroethane	1.0	U	1.0	ug/L			04/21/22 11:01	
1,1-Dichloroethene	1.0	U	1.0	ug/L			04/21/22 11:01	
1,2-Dichloropropane	1.0	U	1.0	ug/L			04/21/22 11:01	
cis-1,3-Dichloropropene	1.0	U	1.0	ug/L			04/21/22 11:01	
rans-1,3-Dichloropropene	1.0	U	1.0	ug/L			04/21/22 11:01	
Ethylbenzene	1.0	U	1.0	ug/L			04/21/22 11:01	
2-Hexanone	10	U	10	ug/L			04/21/22 11:01	
Methylene Chloride	5.0		5.0	ug/L			04/21/22 11:01	
4-Methyl-2-pentanone (MIBK)	10		10	ug/L			04/21/22 11:01	
Styrene	1.0		1.0	ug/L			04/21/22 11:01	
1,1,2,2-Tetrachloroethane	1.0		1.0	ug/L			04/21/22 11:01	
Tetrachloroethene	1.0		1.0	ug/L			04/21/22 11:01	
Toluene	1.0		1.0	ug/L			04/21/22 11:01	
Trichloroethene	1.0		1.0	ug/L			04/21/22 11:01	
Vinyl chloride	1.0		1.0	ug/L			04/21/22 11:01	
Xylenes, Total	2.0		2.0	ug/L			04/21/22 11:01	
1,1,1-Trichloroethane	1.0		1.0	ug/L			04/21/22 11:01	
1,1,2-Trichloroethane	1.0		1.0	ug/L			04/21/22 11:01	
1,2-Dibromo-3-Chloropropane	2.0		2.0	ug/L			04/21/22 11:01	
1,2-Dibromoethane	1.0		1.0	ug/L			04/21/22 11:01	
Dichlorodifluoromethane	1.0		1.0	ug/L			04/21/22 11:01	
cis-1,2-Dichloroethene	1.0		1.0	ug/L			04/21/22 11:01	
trans-1,2-Dichloroethene	1.0		1.0	ug/L			04/21/22 11:01	
Isopropylbenzene	1.0		1.0	ug/L ug/L			04/21/22 11:01	
Methyl tert-butyl ether	1.0		1.0	ug/L ug/L			04/21/22 11:01	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0		1.0	_			04/21/22 11:01	
1,1,2-Trichloro-1,2,2-unidoroeurarie 1,2,4-Trichlorobenzene	1.0		1.0	ug/L			04/21/22 11:01	
1,2-Dichlorobenzene	1.0		1.0	ug/L			04/21/22 11:01	
	1.0			ug/L				
1,3-Dichlorobenzene			1.0	ug/L			04/21/22 11:01	
1,4-Dichlorobenzene	1.0		1.0	ug/L			04/21/22 11:01	
Trichlorofluoromethane	1.0		1.0	ug/L			04/21/22 11:01	
Dibromochloromethane	1.0		1.0	ug/L			04/21/22 11:01	

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Analyzed

04/21/22 11:01

Prepared

Limits

62 - 137

%Recovery Qualifier

78

Dil Fac

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QC Sample Results

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Job ID: 240-165203-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-523444/8

Matrix: Water

Analysis Batch: 523444

Client Sample ID: Method Blank

Prep Type: Total/NA

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	78		56 - 136		04/21/22 11:01	1
Toluene-d8 (Surr)	81		78 - 122		04/21/22 11:01	1
Dibromofluoromethane (Surr)	89		73 - 120		04/21/22 11:01	1

Lab Sample ID: LCS 240-523444/5

Matrix: Water

Analysis Batch: 523444

Client Sample ID:	Lab Control Sample
	Pren Type: Total/NA

Prep	Type:	Total/NA
%Rec		

Analyte	Spike Added		LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Acetone	40.0	21.8	Qualifier	ug/L	=	54	50 - 149	
Benzene	20.0	18.3		ug/L		91	77 - 123	
Bromodichloromethane	20.0	15.2		ug/L		76	69 - 126	
Bromoform	20.0	13.2		ug/L		66	57 - 129	
Bromomethane	20.0	16.9		ug/L		84	36 - 142	
2-Butanone (MEK)	40.0	27.3		ug/L		68	54 - 156	
Carbon disulfide	20.0	15.0		ug/L		75	43 - 140	
Carbon tetrachloride	20.0	16.6		ug/L		83	55 - 137	
Chlorobenzene	20.0	19.2		ug/L		96	80 - 121	
Chloroethane	20.0	16.0		ug/L		80	38 - 152	
Chloroform	20.0	17.5		ug/L		88	74 - 122	
Chloromethane	20.0	14.8		ug/L		74	47 - 143	
1,1-Dichloroethane	20.0	15.4		ug/L		77	72 - 127	
1,2-Dichloroethane	20.0	15.6		ug/L		78	66 - 128	
1,1-Dichloroethene	20.0	18.8		ug/L		94	63 - 134	
1,2-Dichloropropane	20.0	16.1		ug/L		81	75 - 133	
cis-1,3-Dichloropropene	20.0	14.9		ug/L		75	64 - 130	
trans-1,3-Dichloropropene	20.0	12.6		ug/L		63	57 ₋ 129	
Ethylbenzene	20.0	18.7		ug/L		94	80 - 121	
2-Hexanone	40.0	23.1		ug/L		58	43 - 167	
Methylene Chloride	20.0	17.2		ug/L		86	71 - 125	
4-Methyl-2-pentanone (MIBK)	40.0	24.2		ug/L		60	46 - 158	
Styrene	20.0	17.9		ug/L		89	80 - 135	
1,1,2,2-Tetrachloroethane	20.0	16.0		ug/L		80	58 - 157	
Tetrachloroethene	20.0	21.1		ug/L		105	76 - 123	
Toluene	20.0	17.9		ug/L		90	80 - 123	
Trichloroethene	20.0	21.1		ug/L		105	70 - 122	
Vinyl chloride	20.0	17.1		ug/L		86	60 - 144	
Xylenes, Total	40.0	38.0		ug/L		95	80 - 121	
1,1,1-Trichloroethane	20.0	16.7		ug/L		84	64 - 131	
1,1,2-Trichloroethane	20.0	17.8		ug/L		89	70 - 138	
1,2-Dibromo-3-Chloropropane	20.0	11.2		ug/L		56	53 - 135	
1,2-Dibromoethane	20.0	17.3		ug/L		86	71 - 134	
Dichlorodifluoromethane	20.0	21.0		ug/L		105	34 - 153	
cis-1,2-Dichloroethene	20.0	19.0		ug/L		95	77 - 123	
trans-1,2-Dichloroethene	20.0	18.2		ug/L		91	75 - 124	
Isopropylbenzene	20.0	19.0		ug/L		95	74 - 128	
Methyl tert-butyl ether	20.0	14.8		ug/L		74	65 - 126	
1,1,2-Trichloro-1,2,2-trifluoroetha	20.0	20.4		ug/L		102	51 - 146	
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Eurofins Canton

QC Sample Results

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Job ID: 240-165203-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-523444/5

Matrix: Water

Analysis Batch: 523444

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

	Spike	LCS	LCS			%Rec	
Analyte	Added	Result	Qualifier	Unit	D %Re	c Limits	
1,2,4-Trichlorobenzene	20.0	17.8		ug/L	8	9 44 - 147	
1,2-Dichlorobenzene	20.0	20.1		ug/L	10	0 78 - 120	
1,3-Dichlorobenzene	20.0	19.2		ug/L	9	6 80 - 120	
1,4-Dichlorobenzene	20.0	19.1		ug/L	9	5 80 - 120	
Trichlorofluoromethane	20.0	18.7		ug/L	9	4 30 - 170	
Dibromochloromethane	20.0	14.8		ug/L	7	4 70 - 124	
m-Xylene & p-Xylene	20.0	19.0		ug/L	9	5 80 - 120	
o-Xylene	20.0	19.0		ug/L	9	5 80 - 123	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	73		62 - 137
4-Bromofluorobenzene (Surr)	86		56 - 136
Toluene-d8 (Surr)	81		78 - 122
Dibromofluoromethane (Surr)	90		73 - 120

QC Association Summary

Client: ZF Active Safety and Electronics LLC

Job ID: 240-165203-1

Project/Site: Milford

GC/MS VOA

Analysis Batch: 523444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-165203-1	OW-16D2_041822	Total/NA	Water	8260B	
240-165203-2	EQUIPMENT BLANK_041822	Total/NA	Water	8260B	
240-165203-3	FIELD BLANK_041822	Total/NA	Water	8260B	
240-165203-4	TRIP BLANK	Total/NA	Water	8260B	
MB 240-523444/8	Method Blank	Total/NA	Water	8260B	
LCS 240-523444/5	Lab Control Sample	Total/NA	Water	8260B	

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Lab Chronicle

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Client Sample ID: OW-16D2 041822 Lab Sample ID: 240-165203-1

Date Collected: 04/18/22 10:55

Matrix: Water

Job ID: 240-165203-1

Matrix: Water

Date Received: 04/19/22 10:00

Batch Dilution Batch **Batch Prepared** Method or Analyzed **Prep Type** Type Run **Factor** Number Analyst Lab Total/NA Analysis 8260B 523444 04/21/22 15:37 LEE TAL CAN

Client Sample ID: EQUIPMENT BLANK 041822 Lab Sample ID: 240-165203-2

Date Collected: 04/18/22 11:20 Date Received: 04/19/22 10:00

Batch Batch Dilution **Batch** Prepared **Prep Type** Type Method Run Factor Number or Analyzed Analyst Lab Total/NA Analysis 8260B 523444 04/21/22 16:02 LEE TAL CAN

Client Sample ID: FIELD BLANK_041822 Lab Sample ID: 240-165203-3

Date Collected: 04/18/22 10:35 **Matrix: Water**

Date Received: 04/19/22 10:00

Batch Batch Dilution Batch **Prepared Prep Type** Method **Factor** Number or Analyzed Type Run Analyst Lab TAL CAN Total/NA Analysis 8260B 523444 04/21/22 16:27 LEE

Client Sample ID: TRIP BLANK Lab Sample ID: 240-165203-4

Date Collected: 04/18/22 00:00 **Matrix: Water**

Date Received: 04/19/22 10:00

Batch **Batch** Dilution Batch **Prepared Prep Type** Method Run Factor Number or Analyzed Analyst Type Lab 8260B 523444 04/21/22 16:52 LEE TAL CAN Total/NA Analysis

Laboratory References:

TAL CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Eurofins Canton

Accreditation/Certification Summary

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Job ID: 240-165203-1

Laboratory: Eurofins Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date		
California	State	2927	02-27-23		
Connecticut	State	PH-0590	12-31-23		
Florida	NELAP	E87225	06-30-22		
Georgia	State	4062	02-23-22 *		
Illinois	NELAP	200004	07-31-22		
lowa	State	421	06-01-23		
Kansas	NELAP	E-10336	04-30-22		
Kentucky (UST)	State	112225	02-23-22 *		
Kentucky (WW)	State	KY98016	12-31-22		
Minnesota	NELAP	039-999-348	12-31-22		
Minnesota (Petrofund)	State	3506	08-01-23		
New Jersey	NELAP	OH001	11-06-22		
New York	NELAP	10975	04-01-23		
Ohio	State	8303	02-23-23		
Ohio VAP	State	CL0024	02-27-23		
Oregon	NELAP	4062	02-27-23		
Pennsylvania	NELAP	68-00340	04-24-22		
Texas	NELAP	T104704517-22-16	08-31-22		
Virginia	NELAP	11570	09-14-22		
Washington	State	C971	01-12-23		
West Virginia DEP	State	210	12-31-22		

Eurofins Canton

 $^{^{\}star} \ \text{Accreditation/Certification renewal pending - accreditation/certification considered valid}.$

MICHIGAN 190

STL North Canton				4	/4000																		LAB	USE ONL	Y
4101 Shuffel Drive NW					7		Chain	Of Cu	stod	y/A	Ana	lysis	Rec	ues	st							Labo	ratory ID	No. (Let N	(0.)
North Cauton, OH 44720																									
Attn. Michael DelMonico				Privileged & Co	nfidential		Yes			Site Na	me:	Milfo	rd												
Project Type:	Groundy	vater San	npling · IZ	TRW PO No.	30046730.0001	Z				Site La	cation		Milford	Michig	tan										
TRW PM: (name, company, address, e	-mail)			Database Mana	ger: (name, comp	any, addres	ss, E-mail)				L			Prese	ervativ	es Coo	de (see	below	()						
Bob Bleazard				Marina Samp a	nd Sharon Clouse																				
11202 East Germann Road				28550 Calsot Drive.	Suite 500												Т								
Mesa, AZ 85212				Novi, MI 48377																					
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		Sa	mple Identification as	nd Information						or Composite	Field Fiftered														
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1 OW-16D2			OW-16D2_6-1822			GW	WATER	REG	3	G	,				\top	\top	T					+	Lan Sa	mpre Num	7013
2		500													\top										
3 EQUIPMENT BLANK			EQUIPMENT BLANK 04182	2	1120	QC	WATER	REG	(L	G	N S														
4 FIELD BLANK	5000		FIELD BLANK_04/82	2 4	1035	QC	WATER	REG	1	G	N S														
5 TRIP BLANK			TRIP BLANK_			QC	WATER	REG	1	G.	N 3														
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WI-NC-099

VOA Sample Preservation - Date/Time VOAs Frozen:

4/26/2022



Environment Testing America

ANALYTICAL REPORT

Eurofins Canton 180 S. Van Buren Avenue Barberton, OH 44203 Tel: (330)497-9396

Laboratory Job ID: 240-167051-1

Client Project/Site: Milford

For:

ZF Active Safety and Electronics LLC Tech 2 12025 Tech Center Drive Livonia, Michigan 48150

Attn: Scott Detwiler

Ade Del Your

Authorized for release by: 6/7/2022 2:23:44 PM

Michael DelMonico, Project Manager I (330)497-9396

Michael.DelMonico@et.eurofinsus.com

Links

Review your project results through

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ZF Active Safety and Electronics LLC

Job ID: 240-167051-1 Project/Site: Milford

Qualifiers

GC/MS VOA

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.

Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery **CFL** Contains Free Liquid CFU Colony Forming Unit CNF Contains No Free Liquid

Duplicate Error Ratio (normalized absolute difference) **DER**

Dil Fac **Dilution Factor**

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

Estimated Detection Limit (Dioxin) **EDL** LOD Limit of Detection (DoD/DOE) LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level" MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit MLMinimum Level (Dioxin) MPN Most Probable Number Method Quantitation Limit MQL

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive QC **Quality Control**

Relative Error Ratio (Radiochemistry) **RER**

Reporting Limit or Requested Limit (Radiochemistry) RL

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin) **TEQ** Toxicity Equivalent Quotient (Dioxin)

Too Numerous To Count **TNTC**

Eurofins Canton

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Case Narrative

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Job ID: 240-167051-1

Job ID: 240-167051-1

Laboratory: Eurofins Canton

Narrative

Job Narrative 240-167051-1

Comments

No additional comments.

Receipt

The samples were received on 5/21/2022 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.1° C.

GC/MS VOA

Method 8260D: The continuing calibration verification (CCV) analyzed in batch 240-528486 was outside the method criteria for bromomethane. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

Method 8260D: The continuing calibration verification (CCV) analyzed in batch 240-528483 was outside the method criteria for the following analytes: Bromoform and Methylcyclohexane. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes is considered estimated: OW-10D_051722 (240-167051-2), OW-08D_051722 (240-167051-3), OW-05D2_051722 (240-167051-4), OW-30_051722 (240-167051-5), OW-23D_051722 (240-167051-6), OW-28_051722 (240-167051-7), OW-18D_051822 (240-167051-8), OW-09-ML-D_051822 (240-167051-9), OW-09-ML-C_051822 (240-167051-10), OW-18-ML-A_051822 (240-167051-11), OW-18-ML-B_051822 (240-167051-12), OW-18-ML-C_051922 (240-167051-13) and (CCVIS 240-528483/4).

Method 8260D: The continuing calibration verification (CCV) analyzed in batch 240-528938 was outside the method criteria for some analytes. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes is considered estimated.

Method 8260D: The continuing calibration verification (CCV) analyzed in batch 240-528862 was outside the method criteria for multiple analytes. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes is considered estimated: EQUIPMENT BLANK_051922 (240-167051-22), FIELD BLANK_051922 (240-167051-23), TRIP BLANK_051922 (240-167051-24) and (CCVIS 240-528862/3).

Method 8260D: The continuing calibration verification (CCV) analyzed in batch 240-529073 was outside the method criteria for the following analytes: Bromomethane and Bromoform. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes is considered estimated: OW-22_052022 (240-167051-18), OW-07D_052022 (240-167051-19), DUP-01_052022 (240-167051-20), DUP-02_052022 (240-167051-21) and (CCVIS 240-529073/4).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep

No additional analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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Method Summary

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Job ID: 240-167051-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	TAL CAN
5030C	Purge and Trap	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Sample Summary

Client: ZF Active Safety and Electronics LLC

FIELD BLANK_051922

TRIP BLANK_051922

Project/Site: Milford

240-167051-23

240-167051-24

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-167051-1	OW-16D2_051822	Water	05/18/22 09:18	05/21/22 08:00
240-167051-2	OW-10D_051722	Water	05/17/22 09:42	05/21/22 08:00
240-167051-3	OW-08D_051722	Water	05/17/22 11:45	05/21/22 08:00
240-167051-4	OW-05D2_051722	Water	05/17/22 13:15	05/21/22 08:00
240-167051-5	OW-30_051722	Water	05/17/22 14:35	05/21/22 08:00
240-167051-6	OW-23D_051722	Water	05/17/22 15:56	05/21/22 08:00
240-167051-7	OW-28_051722	Water	05/17/22 17:05	05/21/22 08:00
240-167051-8	OW-18D_051822	Water	05/18/22 11:10	05/21/22 08:00
240-167051-9	OW-09-ML-D_051822	Water	05/18/22 12:10	05/21/22 08:00
240-167051-10	OW-09-ML-C_051822	Water	05/18/22 13:13	05/21/22 08:00
240-167051-11	OW-18-ML-A_051822	Water	05/18/22 14:55	05/21/22 08:00
240-167051-12	OW-18-ML-B_051822	Water	05/18/22 15:33	05/21/22 08:00
240-167051-13	OW-18-ML-C_051922	Water	05/19/22 09:46	05/21/22 08:00
240-167051-14	OW-18-ML-D_051922	Water	05/19/22 10:55	05/21/22 08:00
240-167051-15	OW-18-ML-E_051922	Water	05/19/22 12:46	05/21/22 08:00
240-167051-16	OW-18-ML-F_051922	Water	05/19/22 13:52	05/21/22 08:00
240-167051-17	OW-02D2_051922	Water	05/19/22 16:03	05/21/22 08:00
240-167051-18	OW-22_052022	Water	05/20/22 08:47	05/21/22 08:00
240-167051-19	OW-07D_052022	Water	05/20/22 10:25	05/21/22 08:00
240-167051-20	DUP-01_052022	Water	05/20/22 00:00	05/21/22 08:00
240-167051-21	DUP-02_052022	Water	05/20/22 00:00	05/21/22 08:00
240-167051-22	EQUIPMENT BLANK_051922	Water	05/19/22 10:00	05/21/22 08:00

Water

Water

05/19/22 09:20 05/21/22 08:00

05/19/22 00:00 05/21/22 08:00

Job ID: 240-167051-1

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Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Client Sample ID: OW-16D2 051822 Lab Sample ID: 240-167051-1 Result Qualifier Unit Dil Fac D Method RL **Prep Type** 8260D 1,1-Dichloroethane 1.0 ug/L 3.4 Total/NA cis-1.2-Dichloroethene 8260D 16 1.0 ug/L Total/NA Client Sample ID: OW-10D 051722 Lab Sample ID: 240-167051-2 No Detections. Client Sample ID: OW-08D 051722 Lab Sample ID: 240-167051-3 No Detections. Client Sample ID: OW-05D2 051722 Lab Sample ID: 240-167051-4 No Detections. Client Sample ID: OW-30 051722 Lab Sample ID: 240-167051-5 Analyte Result Qualifier RI Unit Dil Fac D Method **Prep Type** 1.0 ug/L 8260D Trichloroethene 32 Total/NA Client Sample ID: OW-23D 051722 Lab Sample ID: 240-167051-6 Analyte Result Qualifier RI Unit Dil Fac D Method **Prep Type** 8260D Trichloroethene 2.7 1.0 ug/L Total/NA Client Sample ID: OW-28 051722 Lab Sample ID: 240-167051-7 Dil Fac D Method Analyte Result Qualifier RL Unit **Prep Type** cis-1,2-Dichloroethene 3.5 1.0 ug/L 8260D Total/NA Client Sample ID: OW-18D 051822 Lab Sample ID: 240-167051-8 No Detections. Client Sample ID: OW-09-ML-D 051822 Lab Sample ID: 240-167051-9 Result Qualifier RL Unit Dil Fac D Method **Prep Type** cis-1,2-Dichloroethene 1.0 8260D Total/NA 8.1 ug/L Client Sample ID: OW-09-ML-C 051822 Lab Sample ID: 240-167051-10 Result Qualifier **Analyte** RL Unit Dil Fac D Method **Prep Type** cis-1,2-Dichloroethene 38 1.0 ug/L 8260D Total/NA Trichloroethene 1.5 1.0 ug/L 8260D Total/NA Client Sample ID: OW-18-ML-A 051822 Lab Sample ID: 240-167051-11 Analyte Result Qualifier RL Unit Dil Fac D Method Prep Type cis-1.2-Dichloroethene 8260D 1.0 ug/L Total/NA Client Sample ID: OW-18-ML-B 051822 Lab Sample ID: 240-167051-12 Result Qualifier RL Unit Dil Fac D Method **Prep Type** cis-1,2-Dichloroethene 4.1 1.0 ug/L 8260D Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Canton

6/7/2022

Job ID: 240-167051-1

Job ID: 240-167051-1

Client: ZF Active Safety and Electronics LLC Project/Site: Milford

Client Sample ID: OW-18-ML-	C_051922			Lab Sam	ple ID: 24	0-167051-13
 Analyte	Result Qualifier	RL	Unit	Dil Fac D	Method	Prep Type
cis-1,2-Dichloroethene	2.6	1.0	ug/L		8260D	Total/NA
Client Sample ID: OW-18-ML-	D_051922			Lab Sam	ple ID: 24	0-167051-14
Analyte	Result Qualifier	RL	Unit	Dil Fac D	Method	Prep Type
1,1-Dichloroethane	1.2	1.0	ug/L	1	8260D	Total/NA
cis-1,2-Dichloroethene	7.0	1.0	ug/L	1	8260D	Total/NA
Client Sample ID: OW-18-ML-	E_051922			Lab Sam	ple ID: 24	0-167051-15
Analyte	Result Qualifier	RL	Unit	Dil Fac D	Method	Prep Type
1,1-Dichloroethane	1.4	1.0	ug/L		8260D	Total/NA
cis-1,2-Dichloroethene	7.5	1.0	ug/L	1	8260D	Total/NA
Client Sample ID: OW-18-ML-	F_051922			Lab Sam	ple ID: 24	0-167051-16
 Analyte	Result Qualifier	RL	Unit	Dil Fac D	Method	Prep Type
cis-1,2-Dichloroethene	14	1.0	ug/L	1	8260D	Total/NA
trans-1,2-Dichloroethene	1.4	1.0	ug/L	1	8260D	Total/NA
Client Sample ID: OW-02D2_0)51922			Lab Sam	ple ID: 24	0-167051-17
 Analyte	Result Qualifier	RL	Unit	Dil Fac D	Method	Prep Type
Tetrachloroethene	5.9	2.5	ug/L	2.5	8260D	Total/NA
Trichloroethene	62	2.5	ug/L	2.5	8260D	Total/NA
Client Sample ID: OW-22_052	022			Lab Sam	ple ID: 24	0-167051-18
Analyte	Result Qualifier	RL	Unit	Dil Fac D	Method	Prep Type
1,1,1-Trichloroethane	5.3	2.5	ug/L	2.5	8260D	Total/NA
cis-1,2-Dichloroethene	32	2.5	ug/L	2.5	8260D	Total/NA
Tetrachloroethene	3.2	2.5	ug/L	2.5	8260D	Total/NA
Trichloroethene	54	2.5	ug/L	2.5	8260D	Total/NA
Client Sample ID: OW-07D_0	52022			Lab Sam	ple ID: 24	0-167051-19
No Detections.						
Client Sample ID: DUP-01_05	2022			Lab Sam	ple ID: 24	0-167051-20
Analyte	Result Qualifier	RL	Unit	Dil Fac D	Method	Prep Type
cis-1,2-Dichloroethene	4.1	1.0	ug/L	1	8260D	Total/NA
Client Sample ID: DUP-02_05	2022			Lab Sam	ple ID: 24	0-167051-21
No Detections.						
Client Sample ID: EQUIPMEN	T BLANK_05192	22		Lab Sam	ple ID: 24	0-167051-22
No Detections.						
Client Sample ID: FIELD BLA	NK_051922			Lab Sam	ple ID: 24	0-167051-23
No Detections.						
Client Sample ID: TRIP BLAN	K_051922			Lab Sam	ple ID: 24	0-167051-24
No Detections.						

This Detection Summary does not include radiochemical test results.

Eurofins Canton

6/7/2022

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Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Client Sample ID: OW-16D2_051822

Date Collected: 05/18/22 09:18 Date Received: 05/21/22 08:00 Lab Sample ID: 240-167051-1

Matrix: Water

Job ID: 240-167051-1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	1.0	U	1.0	ug/L		-	05/31/22 19:52	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	ug/L			05/31/22 19:52	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	ug/L			05/31/22 19:52	
1,1,2-Trichloroethane	1.0	U	1.0	ug/L			05/31/22 19:52	
1,1-Dichloroethane	3.4		1.0	ug/L			05/31/22 19:52	
1,1-Dichloroethene	1.0	U	1.0	ug/L			05/31/22 19:52	
1,2,4-Trichlorobenzene	1.0	Ü	1.0	ug/L			05/31/22 19:52	
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	ug/L			05/31/22 19:52	
Ethylene Dibromide	1.0	U	1.0	ug/L			05/31/22 19:52	
1,2-Dichlorobenzene	1.0	U	1.0	ug/L			05/31/22 19:52	
1,2-Dichloroethane	1.0	U	1.0	ug/L			05/31/22 19:52	
1,2-Dichloropropane	1.0	U	1.0	ug/L			05/31/22 19:52	
1,3-Dichlorobenzene	1.0	U	1.0	ug/L			05/31/22 19:52	
1,4-Dichlorobenzene	1.0	U	1.0	ug/L			05/31/22 19:52	
2-Butanone (MEK)	10		10	ug/L			05/31/22 19:52	
2-Hexanone	10		10	ug/L			05/31/22 19:52	
4-Methyl-2-pentanone (MIBK)	10		10	ug/L			05/31/22 19:52	
Acetone	10		10	ug/L			05/31/22 19:52	
Benzene	1.0		1.0	ug/L			05/31/22 19:52	
Dichlorobromomethane	1.0	_	1.0	ug/L			05/31/22 19:52	
Bromoform	1.0		1.0	ug/L			05/31/22 19:52	
3romomethane	1.0		1.0	ug/L			05/31/22 19:52	
Carbon disulfide	1.0		1.0	ug/L			05/31/22 19:52	
Carbon tetrachloride	1.0		1.0	ug/L			05/31/22 19:52	
Chlorobenzene	1.0		1.0	ug/L			05/31/22 19:52	
Chloroethane	1.0		1.0	ug/L			05/31/22 19:52	
Chloroform	1.0		1.0	ug/L			05/31/22 19:52	
Chloromethane	1.0		1.0	ug/L			05/31/22 19:52	
cis-1,2-Dichloroethene	16	Ü	1.0	ug/L			05/31/22 19:52	
cis-1,3-Dichloropropene	1.0	U	1.0	ug/L			05/31/22 19:52	
Cyclohexane	1.0		1.0	ug/L			05/31/22 19:52	
Chlorodibromomethane	1.0		1.0	ug/L			05/31/22 19:52	
Dichlorodifluoromethane	1.0	_	1.0	ug/L			05/31/22 19:52	
Ethylbenzene	1.0		1.0	ug/L			05/31/22 19:52	
Isopropylbenzene	1.0		1.0	ug/L			05/31/22 19:52	
Methyl acetate	10		10	ug/L			05/31/22 19:52	
Methyl tert-butyl ether	1.0		1.0	ug/L			05/31/22 19:52	
	1.0		1.0				05/31/22 19:52	
Methylcyclohexane Methylene Chloride	5.0		5.0	ug/L ug/L			05/31/22 19:52	
Styrene	1.0		1.0				05/31/22 19:52	
Tetrachloroethene	1.0			ug/L				
			1.0	ug/L			05/31/22 19:52	
Toluene	1.0		1.0	ug/L			05/31/22 19:52	
trans-1,2-Dichloroethene	1.0		1.0	ug/L			05/31/22 19:52	
trans-1,3-Dichloropropene	1.0		1.0	ug/L			05/31/22 19:52	
Trichloroethene	1.0		1.0	ug/L			05/31/22 19:52	
Trichlorofluoromethane	1.0		1.0	ug/L			05/31/22 19:52	
Vinyl chloride Xylenes, Total	1.0 2.0		1.0 2.0	ug/L ug/L			05/31/22 19:52 05/31/22 19:52	

Eurofins Canton

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Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Lab Sample ID: 240-167051-1 Client Sample ID: OW-16D2_051822

Date Collected: 05/18/22 09:18 Date Received: 05/21/22 08:00

Matrix: Water

Job ID: 240-167051-1

Surrogate	%Recovery Qualif	ier Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102	78 - 122		05/31/22 19:52	1
Dibromofluoromethane (Surr)	97	73 - 120		05/31/22 19:52	1
4-Bromofluorobenzene (Surr)	98	56 ₋ 136		05/31/22 19:52	1
1,2-Dichloroethane-d4 (Surr)	109	62 - 137		05/31/22 19:52	1

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Client Sample ID: OW-10D_051722

Date Collected: 05/17/22 09:42 Date Received: 05/21/22 08:00 Job ID: 240-167051-1

Lab Sample ID: 240-167051-2

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	1.0	U	1.0	ug/L			05/31/22 14:14	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	ug/L			05/31/22 14:14	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	ug/L			05/31/22 14:14	
1,1,2-Trichloroethane	1.0	U	1.0	ug/L			05/31/22 14:14	
1,1-Dichloroethane	1.0	U	1.0	ug/L			05/31/22 14:14	
1,1-Dichloroethene	1.0	U	1.0	ug/L			05/31/22 14:14	
1,2,4-Trichlorobenzene	1.0	U	1.0	ug/L			05/31/22 14:14	
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	ug/L			05/31/22 14:14	
Ethylene Dibromide	1.0	U	1.0	ug/L			05/31/22 14:14	
1,2-Dichlorobenzene	1.0	U	1.0	ug/L			05/31/22 14:14	
1,2-Dichloroethane	1.0	U	1.0	ug/L			05/31/22 14:14	
1,2-Dichloropropane	1.0	U	1.0	ug/L			05/31/22 14:14	
1,3-Dichlorobenzene	1.0	U	1.0	ug/L			05/31/22 14:14	
1,4-Dichlorobenzene	1.0	U	1.0	ug/L			05/31/22 14:14	
2-Butanone (MEK)	10	U	10	ug/L			05/31/22 14:14	
2-Hexanone	10	U	10	ug/L			05/31/22 14:14	
4-Methyl-2-pentanone (MIBK)	10	U	10	ug/L			05/31/22 14:14	
Acetone	10	U	10	ug/L			05/31/22 14:14	
Benzene	1.0		1.0	ug/L			05/31/22 14:14	
Dichlorobromomethane	1.0		1.0	ug/L			05/31/22 14:14	
Bromoform	1.0		1.0	ug/L			05/31/22 14:14	
3romomethane	1.0		1.0	ug/L			05/31/22 14:14	
Carbon disulfide	1.0		1.0	ug/L			05/31/22 14:14	
Carbon tetrachloride	1.0		1.0	ug/L			05/31/22 14:14	
Chlorobenzene	1.0		1.0	ug/L			05/31/22 14:14	
Chloroethane	1.0		1.0	ug/L			05/31/22 14:14	
Chloroform	1.0		1.0	ug/L			05/31/22 14:14	
Chloromethane	1.0		1.0	ug/L			05/31/22 14:14	
cis-1,2-Dichloroethene	1.0		1.0	ug/L			05/31/22 14:14	
cis-1,3-Dichloropropene	1.0		1.0	ug/L			05/31/22 14:14	
Cyclohexane	1.0		1.0	ug/L			05/31/22 14:14	
Chlorodibromomethane	1.0		1.0	ug/L			05/31/22 14:14	
Dichlorodifluoromethane	1.0	_	1.0	ug/L			05/31/22 14:14	
Ethylbenzene	1.0		1.0	ug/L			05/31/22 14:14	
sopropylbenzene	1.0		1.0	ug/L			05/31/22 14:14	
Methyl acetate	10		10	ug/L			05/31/22 14:14	
Methyl tert-butyl ether	1.0		1.0	ug/L			05/31/22 14:14	
Methylcyclohexane	1.0		1.0	ug/L			05/31/22 14:14	
Methylene Chloride	5.0		5.0	ug/L			05/31/22 14:14	
Styrene	1.0		1.0	ug/L			05/31/22 14:14	
Tetrachloroethene	1.0		1.0	ug/L			05/31/22 14:14	
Toluene	1.0		1.0	ug/L			05/31/22 14:14	
trans-1,2-Dichloroethene	1.0		1.0				05/31/22 14:14	
trans-1,2-Dichloroethene trans-1,3-Dichloropropene	1.0		1.0	ug/L ug/L			05/31/22 14:14	
Trichloroethene	1.0			-			05/31/22 14:14	
Trichlorofluoromethane			1.0	ug/L				
	1.0		1.0	ug/L			05/31/22 14:14	
Vinyl chloride Xylenes, Total	1.0 2.0		1.0 2.0	ug/L ug/L			05/31/22 14:14 05/31/22 14:14	

Eurofins Canton

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Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Client Sample ID: OW-10D_051722 Lab Sample ID: 240-167051-2

Date Collected: 05/17/22 09:42 Date Received: 05/21/22 08:00

Matrix: Water

Job ID: 240-167051-1

Surrogate	%Recovery Qualifie	r Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	86	78 - 122		05/31/22 14:14	1
Dibromofluoromethane (Surr)	96	73 - 120		05/31/22 14:14	1
4-Bromofluorobenzene (Surr)	89	56 ₋ 136		05/31/22 14:14	1
1,2-Dichloroethane-d4 (Surr)	93	62 - 137		05/31/22 14:14	1

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Client Sample ID: OW-08D_051722

Date Collected: 05/17/22 11:45 Date Received: 05/21/22 08:00

Lab Sample ID: 240-167051-3

Matrix: Water

Job ID: 240-167051-1

Analyte	Result	Qualifier	RL	Unit	D Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	1.0	U	1.0	ug/L		05/31/22 15:28	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	ug/L		05/31/22 15:28	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	ug/L		05/31/22 15:28	
1,1,2-Trichloroethane	1.0	U	1.0	ug/L		05/31/22 15:28	
1,1-Dichloroethane	1.0	U	1.0	ug/L		05/31/22 15:28	
1,1-Dichloroethene	1.0	U	1.0	ug/L		05/31/22 15:28	
1,2,4-Trichlorobenzene	1.0	U	1.0	ug/L		05/31/22 15:28	
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	ug/L		05/31/22 15:28	
Ethylene Dibromide	1.0	U	1.0	ug/L		05/31/22 15:28	
1,2-Dichlorobenzene	1.0	U	1.0	ug/L		05/31/22 15:28	
1,2-Dichloroethane	1.0	U	1.0	ug/L		05/31/22 15:28	
1,2-Dichloropropane	1.0	U	1.0	ug/L		05/31/22 15:28	
1,3-Dichlorobenzene	1.0	U	1.0	ug/L		05/31/22 15:28	
1,4-Dichlorobenzene	1.0	U	1.0	ug/L		05/31/22 15:28	
2-Butanone (MEK)	10	U	10	ug/L		05/31/22 15:28	
2-Hexanone	10	U	10	ug/L		05/31/22 15:28	
4-Methyl-2-pentanone (MIBK)	10	U	10	ug/L		05/31/22 15:28	
Acetone	10	U	10	ug/L		05/31/22 15:28	
Benzene	1.0	U	1.0	ug/L		05/31/22 15:28	
Dichlorobromomethane	1.0	U	1.0	ug/L		05/31/22 15:28	
Bromoform	1.0	U	1.0	ug/L		05/31/22 15:28	
Bromomethane	1.0	U	1.0	ug/L		05/31/22 15:28	
Carbon disulfide	1.0	U	1.0	ug/L		05/31/22 15:28	
Carbon tetrachloride	1.0	U	1.0	ug/L		05/31/22 15:28	
Chlorobenzene	1.0	U	1.0	ug/L		05/31/22 15:28	
Chloroethane	1.0	U	1.0	ug/L		05/31/22 15:28	
Chloroform	1.0	U	1.0	ug/L		05/31/22 15:28	
Chloromethane	1.0	U	1.0	ug/L		05/31/22 15:28	
cis-1,2-Dichloroethene	1.0	U	1.0	ug/L		05/31/22 15:28	
cis-1,3-Dichloropropene	1.0	U	1.0	ug/L		05/31/22 15:28	
Cyclohexane	1.0	U	1.0	ug/L		05/31/22 15:28	
Chlorodibromomethane	1.0	U	1.0	ug/L		05/31/22 15:28	
Dichlorodifluoromethane	1.0	U	1.0	ug/L		05/31/22 15:28	
Ethylbenzene	1.0	Ü	1.0	ug/L		05/31/22 15:28	
Isopropylbenzene	1.0	U	1.0	ug/L		05/31/22 15:28	
Methyl acetate	10	U	10	ug/L		05/31/22 15:28	
Methyl tert-butyl ether	1.0	U	1.0	ug/L		05/31/22 15:28	
Methylcyclohexane	1.0	U	1.0	ug/L		05/31/22 15:28	
Methylene Chloride	5.0	U	5.0	ug/L		05/31/22 15:28	
Styrene	1.0	U	1.0	ug/L		05/31/22 15:28	
Tetrachloroethene	1.0	U	1.0	ug/L		05/31/22 15:28	
Toluene	1.0	U	1.0	ug/L		05/31/22 15:28	
trans-1,2-Dichloroethene	1.0		1.0	ug/L		05/31/22 15:28	
trans-1,3-Dichloropropene	1.0		1.0	ug/L		05/31/22 15:28	
Trichloroethene	1.0		1.0	ug/L		05/31/22 15:28	
Trichlorofluoromethane	1.0		1.0	ug/L		05/31/22 15:28	
Vinyl chloride	1.0		1.0	ug/L		05/31/22 15:28	
Xylenes, Total	2.0		2.0	ug/L		05/31/22 15:28	

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Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Lab Sample ID: 240-167051-3

Client Sample ID: OW-08D_051722 Date Collected: 05/17/22 11:45

Matrix: Water

Job ID: 240-167051-1

Date Received: 05/21/22 08:00

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	84	78 - 122		05/31/22 15:28	1
Dibromofluoromethane (Surr)	93	73 - 120		05/31/22 15:28	1
4-Bromofluorobenzene (Surr)	87	56 ₋ 136		05/31/22 15:28	1
1,2-Dichloroethane-d4 (Surr)	93	62 - 137		05/31/22 15:28	1

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Client Sample ID: OW-05D2_051722

Date Collected: 05/17/22 13:15 Date Received: 05/21/22 08:00 Lab Sample ID: 240-167051-4

Matrix: Water

Job ID: 240-167051-1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	1.0	U	1.0	ug/L			05/31/22 15:52	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	ug/L			05/31/22 15:52	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	ug/L			05/31/22 15:52	
1,1,2-Trichloroethane	1.0	U	1.0	ug/L			05/31/22 15:52	
1,1-Dichloroethane	1.0	U	1.0	ug/L			05/31/22 15:52	
1,1-Dichloroethene	1.0	U	1.0	ug/L			05/31/22 15:52	
1,2,4-Trichlorobenzene	1.0	Ü	1.0	ug/L			05/31/22 15:52	
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	ug/L			05/31/22 15:52	
Ethylene Dibromide	1.0	U	1.0	ug/L			05/31/22 15:52	
1,2-Dichlorobenzene	1.0	U	1.0	ug/L			05/31/22 15:52	
1,2-Dichloroethane	1.0	U	1.0	ug/L			05/31/22 15:52	
1,2-Dichloropropane	1.0		1.0	ug/L			05/31/22 15:52	
1,3-Dichlorobenzene	1.0		1.0	ug/L			05/31/22 15:52	
1,4-Dichlorobenzene	1.0		1.0	ug/L			05/31/22 15:52	
2-Butanone (MEK)	10		10	ug/L			05/31/22 15:52	
2-Hexanone	10		10	ug/L			05/31/22 15:52	
4-Methyl-2-pentanone (MIBK)	10		10	ug/L			05/31/22 15:52	
Acetone	10		10	ug/L			05/31/22 15:52	
Benzene	1.0		1.0	ug/L			05/31/22 15:52	
Dichlorobromomethane	1.0		1.0	ug/L			05/31/22 15:52	
Bromoform	1.0		1.0	ug/L			05/31/22 15:52	
Bromomethane	1.0		1.0	ug/L			05/31/22 15:52	
Carbon disulfide	1.0		1.0	ug/L			05/31/22 15:52	
Carbon distillide Carbon tetrachloride	1.0		1.0	ug/L			05/31/22 15:52	
Calbon tetrachionde	1.0		1.0	.			05/31/22 15:52	
Chloroethane	1.0			ug/L			05/31/22 15:52	
Chloroform			1.0	ug/L				
	1.0		1.0	ug/L			05/31/22 15:52	
Chloromethane	1.0		1.0	ug/L			05/31/22 15:52	
cis-1,2-Dichloroethene	1.0		1.0	ug/L			05/31/22 15:52	
cis-1,3-Dichloropropene	1.0		1.0	ug/L			05/31/22 15:52	
Cyclohexane	1.0		1.0	ug/L			05/31/22 15:52	
Chlorodibromomethane	1.0		1.0	ug/L			05/31/22 15:52	
Dichlorodifluoromethane	1.0		1.0	ug/L			05/31/22 15:52	
Ethylbenzene 	1.0		1.0	ug/L			05/31/22 15:52	
Isopropylbenzene	1.0		1.0	ug/L			05/31/22 15:52	
Methyl acetate	10		10	ug/L			05/31/22 15:52	
Methyl tert-butyl ether	1.0		1.0	ug/L			05/31/22 15:52	
Methylcyclohexane	1.0		1.0	ug/L			05/31/22 15:52	•
Methylene Chloride	5.0		5.0	ug/L			05/31/22 15:52	
Styrene	1.0		1.0	ug/L			05/31/22 15:52	
Tetrachloroethene	1.0		1.0	ug/L			05/31/22 15:52	
Toluene	1.0		1.0	ug/L			05/31/22 15:52	
trans-1,2-Dichloroethene	1.0		1.0	ug/L			05/31/22 15:52	
trans-1,3-Dichloropropene	1.0	U	1.0	ug/L			05/31/22 15:52	
Trichloroethene	1.0	U	1.0	ug/L			05/31/22 15:52	
Trichlorofluoromethane	1.0	U	1.0	ug/L			05/31/22 15:52	
Vinyl chloride	1.0	U	1.0	ug/L			05/31/22 15:52	•
Xylenes, Total	2.0	U	2.0	ug/L			05/31/22 15:52	

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Client: ZF Active Safety and Electronics LLC Job ID: 240-167051-1

Project/Site: Milford

Client Sample ID: OW-05D2_051722

Date Collected: 05/17/22 13:15

Date Received: 05/21/22 08:00

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	87	78 - 122		05/31/22 15:52	1
Dibromofluoromethane (Surr)	97	73 - 120		05/31/22 15:52	1
4-Bromofluorobenzene (Surr)	90	56 ₋ 136		05/31/22 15:52	1
1,2-Dichloroethane-d4 (Surr)	94	62 - 137		05/31/22 15:52	1

Lab Sample ID: 240-167051-4

Matrix: Water

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Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Client Sample ID: OW-30_051722

Date Collected: 05/17/22 14:35 Date Received: 05/21/22 08:00 Lab Sample ID: 240-167051-5

Matrix: Water

Job ID: 240-167051-1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	ug/L			05/31/22 16:17	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	ug/L			05/31/22 16:17	•
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	ug/L			05/31/22 16:17	•
1,1,2-Trichloroethane	1.0	U	1.0	ug/L			05/31/22 16:17	
1,1-Dichloroethane	1.0	U	1.0	ug/L			05/31/22 16:17	•
1,1-Dichloroethene	1.0	U	1.0	ug/L			05/31/22 16:17	
1,2,4-Trichlorobenzene	1.0	U	1.0	ug/L			05/31/22 16:17	
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	ug/L			05/31/22 16:17	
Ethylene Dibromide	1.0	U	1.0	ug/L			05/31/22 16:17	
1,2-Dichlorobenzene	1.0	U	1.0	ug/L			05/31/22 16:17	
1,2-Dichloroethane	1.0	U	1.0	ug/L			05/31/22 16:17	
1,2-Dichloropropane	1.0	U	1.0	ug/L			05/31/22 16:17	
1,3-Dichlorobenzene	1.0	U	1.0	ug/L			05/31/22 16:17	
1,4-Dichlorobenzene	1.0	U	1.0	ug/L			05/31/22 16:17	
2-Butanone (MEK)	10	U	10	ug/L			05/31/22 16:17	
2-Hexanone	10	U	10	ug/L			05/31/22 16:17	
4-Methyl-2-pentanone (MIBK)	10	U	10	ug/L			05/31/22 16:17	
Acetone	10	U	10	ug/L			05/31/22 16:17	
Benzene	1.0	U	1.0	ug/L			05/31/22 16:17	
Dichlorobromomethane	1.0	U	1.0	ug/L			05/31/22 16:17	
Bromoform	1.0	U	1.0	ug/L			05/31/22 16:17	
Bromomethane	1.0	U	1.0	ug/L			05/31/22 16:17	
Carbon disulfide	1.0	U	1.0	ug/L			05/31/22 16:17	
Carbon tetrachloride	1.0	U	1.0	ug/L			05/31/22 16:17	
Chlorobenzene	1.0	U	1.0	ug/L			05/31/22 16:17	
Chloroethane	1.0	U	1.0	ug/L			05/31/22 16:17	
Chloroform	1.0	U	1.0	ug/L			05/31/22 16:17	
Chloromethane	1.0	U	1.0	ug/L			05/31/22 16:17	
cis-1,2-Dichloroethene	1.0	U	1.0	ug/L			05/31/22 16:17	
cis-1,3-Dichloropropene	1.0	U	1.0	ug/L			05/31/22 16:17	
Cyclohexane	1.0	U	1.0	ug/L			05/31/22 16:17	
Chlorodibromomethane	1.0	U	1.0	ug/L			05/31/22 16:17	
Dichlorodifluoromethane	1.0	U	1.0	ug/L			05/31/22 16:17	
Ethylbenzene	1.0	U	1.0	ug/L			05/31/22 16:17	
Isopropylbenzene	1.0	U	1.0	ug/L			05/31/22 16:17	
Methyl acetate	10	U	10	ug/L			05/31/22 16:17	
Methyl tert-butyl ether	1.0		1.0	ug/L			05/31/22 16:17	
Methylcyclohexane	1.0		1.0	ug/L			05/31/22 16:17	
Methylene Chloride	5.0		5.0	ug/L			05/31/22 16:17	
Styrene	1.0		1.0	ug/L			05/31/22 16:17	
Tetrachloroethene	1.0	U	1.0	ug/L			05/31/22 16:17	
Toluene	1.0	U	1.0	ug/L			05/31/22 16:17	
trans-1,2-Dichloroethene	1.0		1.0	ug/L			05/31/22 16:17	
trans-1,3-Dichloropropene	1.0		1.0	ug/L			05/31/22 16:17	
Trichloroethene	3.2		1.0	ug/L			05/31/22 16:17	
Trichlorofluoromethane	1.0	U	1.0	ug/L			05/31/22 16:17	
Vinyl chloride	1.0		1.0	ug/L			05/31/22 16:17	
Xylenes, Total	2.0		2.0	ug/L			05/31/22 16:17	

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Client: ZF Active Safety and Electronics LLC Job ID: 240-167051-1

Project/Site: Milford

Date Received: 05/21/22 08:00

Client Sample ID: OW-30_051722 Lab Sample ID: 240-167051-5

Date Collected: 05/17/22 14:35 **Matrix: Water**

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	85	78 - 122		05/31/22 16:17	1
Dibromofluoromethane (Surr)	96	73 - 120		05/31/22 16:17	1
4-Bromofluorobenzene (Surr)	90	56 ₋ 136		05/31/22 16:17	1
1,2-Dichloroethane-d4 (Surr)	93	62 - 137		05/31/22 16:17	1

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Client Sample ID: OW-23D_051722

Date Collected: 05/17/22 15:56 Date Received: 05/21/22 08:00 Lab Sample ID: 240-167051-6

Matrix: Water

Job ID: 240-167051-1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	ug/L			05/31/22 16:42	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	ug/L			05/31/22 16:42	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	ug/L			05/31/22 16:42	
1,1,2-Trichloroethane	1.0	U	1.0	ug/L			05/31/22 16:42	
1,1-Dichloroethane	1.0	U	1.0	ug/L			05/31/22 16:42	
1,1-Dichloroethene	1.0	U	1.0	ug/L			05/31/22 16:42	
1,2,4-Trichlorobenzene	1.0	U	1.0	ug/L			05/31/22 16:42	
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	ug/L			05/31/22 16:42	
Ethylene Dibromide	1.0	U	1.0	ug/L			05/31/22 16:42	
1,2-Dichlorobenzene	1.0	U	1.0	ug/L			05/31/22 16:42	
1,2-Dichloroethane	1.0	U	1.0	ug/L			05/31/22 16:42	
1,2-Dichloropropane	1.0	U	1.0	ug/L			05/31/22 16:42	
1,3-Dichlorobenzene	1.0	U	1.0	ug/L			05/31/22 16:42	
1,4-Dichlorobenzene	1.0	U	1.0	ug/L			05/31/22 16:42	
2-Butanone (MEK)	10	U	10	ug/L			05/31/22 16:42	
2-Hexanone	10	U	10	ug/L			05/31/22 16:42	
4-Methyl-2-pentanone (MIBK)	10	U	10	ug/L			05/31/22 16:42	
Acetone	10	U	10	ug/L			05/31/22 16:42	
Benzene	1.0	U	1.0	ug/L			05/31/22 16:42	
Dichlorobromomethane	1.0	U	1.0	ug/L			05/31/22 16:42	
Bromoform	1.0	U	1.0	ug/L			05/31/22 16:42	
Bromomethane	1.0	U	1.0	ug/L			05/31/22 16:42	
Carbon disulfide	1.0	U	1.0	ug/L			05/31/22 16:42	
Carbon tetrachloride	1.0	U	1.0	ug/L			05/31/22 16:42	
Chlorobenzene	1.0	U	1.0	ug/L			05/31/22 16:42	
Chloroethane	1.0	U	1.0	ug/L			05/31/22 16:42	
Chloroform	1.0	U	1.0	ug/L			05/31/22 16:42	
Chloromethane	1.0	U	1.0	ug/L			05/31/22 16:42	
cis-1,2-Dichloroethene	1.0	U	1.0	ug/L			05/31/22 16:42	
cis-1,3-Dichloropropene	1.0	U	1.0	ug/L			05/31/22 16:42	
Cyclohexane	1.0	U	1.0	ug/L			05/31/22 16:42	
Chlorodibromomethane	1.0	U	1.0	ug/L			05/31/22 16:42	
Dichlorodifluoromethane	1.0	U	1.0	ug/L			05/31/22 16:42	
Ethylbenzene	1.0	U	1.0	ug/L			05/31/22 16:42	
Isopropylbenzene	1.0	U	1.0	ug/L			05/31/22 16:42	
Methyl acetate	10	U	10	ug/L			05/31/22 16:42	
Methyl tert-butyl ether	1.0		1.0	ug/L			05/31/22 16:42	
Methylcyclohexane	1.0		1.0	ug/L			05/31/22 16:42	
Methylene Chloride	5.0		5.0	ug/L			05/31/22 16:42	
Styrene	1.0		1.0	ug/L			05/31/22 16:42	
Tetrachloroethene	1.0		1.0	ug/L			05/31/22 16:42	
Toluene	1.0		1.0	ug/L			05/31/22 16:42	
trans-1,2-Dichloroethene	1.0		1.0	ug/L			05/31/22 16:42	
trans-1,3-Dichloropropene	1.0		1.0	ug/L			05/31/22 16:42	
Trichloroethene	2.7		1.0	ug/L			05/31/22 16:42	
Trichlorofluoromethane	1.0		1.0	ug/L			05/31/22 16:42	
Vinyl chloride	1.0		1.0	ug/L			05/31/22 16:42	
Xylenes, Total	2.0		2.0	ug/L			05/31/22 16:42	

Eurofins Canton

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Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Client Sample ID: OW-23D_051722 Lab Sample ID: 240-167051-6

Date Collected: 05/17/22 15:56 Date Received: 05/21/22 08:00

Matrix: Water

Job ID: 240-167051-1

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	84	78 - 122		05/31/22 16:42	1
Dibromofluoromethane (Surr)	95	73 - 120		05/31/22 16:42	1
4-Bromofluorobenzene (Surr)	88	56 ₋ 136		05/31/22 16:42	1
1,2-Dichloroethane-d4 (Surr)	94	62 - 137		05/31/22 16:42	1

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Client Sample ID: OW-28_051722

Date Collected: 05/17/22 17:05
Date Received: 05/21/22 08:00

Lab Sample ID: 240-167051-7

Matrix: Water

Job ID: 240-167051-1

Analyte	Result Q	ualifier R	L Unit	D Pi	repared Analyzed	Dil Fa
1,1,1-Trichloroethane	1.0 U	1.	0 ug/L		05/31/22 17:06	
1,1,2,2-Tetrachloroethane	1.0 U	1.	0 ug/L		05/31/22 17:06	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0 U	1.	0 ug/L		05/31/22 17:06	
1,1,2-Trichloroethane	1.0 U	1.	0 ug/L		05/31/22 17:06	
1,1-Dichloroethane	1.0 U	1.	0 ug/L		05/31/22 17:06	
1,1-Dichloroethene	1.0 U	1.	0 ug/L		05/31/22 17:06	
1,2,4-Trichlorobenzene	1.0 U	1.	0 ug/L		05/31/22 17:06	
1,2-Dibromo-3-Chloropropane	2.0 U	2.	0 ug/L		05/31/22 17:06	
Ethylene Dibromide	1.0 U	1.	0 ug/L		05/31/22 17:06	
1,2-Dichlorobenzene	1.0 U	1.	0 ug/L		05/31/22 17:06	
1,2-Dichloroethane	1.0 U	1.	0 ug/L		05/31/22 17:06	
1,2-Dichloropropane	1.0 U	1.	0 ug/L		05/31/22 17:06	
1,3-Dichlorobenzene	1.0 U	1.	0 ug/L		05/31/22 17:06	
1,4-Dichlorobenzene	1.0 U	1.	0 ug/L		05/31/22 17:06	
2-Butanone (MEK)	10 U	1	0 ug/L		05/31/22 17:06	
2-Hexanone	10 U	1	0 ug/L		05/31/22 17:06	
4-Methyl-2-pentanone (MIBK)	10 U	1	0 ug/L		05/31/22 17:06	
Acetone	10 U	1	0 ug/L		05/31/22 17:06	
Benzene	1.0 U	1.	0 ug/L		05/31/22 17:06	
Dichlorobromomethane	1.0 U	1.	0 ug/L		05/31/22 17:06	
Bromoform	1.0 U	1.	0 ug/L		05/31/22 17:06	
Bromomethane	1.0 U	1.	0 ug/L		05/31/22 17:06	
Carbon disulfide	1.0 U	1.	0 ug/L		05/31/22 17:06	
Carbon tetrachloride	1.0 U	1.	0 ug/L		05/31/22 17:06	
Chlorobenzene	1.0 U	1.	0 ug/L		05/31/22 17:06	
Chloroethane	1.0 U	1.	0 ug/L		05/31/22 17:06	
Chloroform	1.0 U	1.	0 ug/L		05/31/22 17:06	
Chloromethane	1.0 U	1.	0 ug/L		05/31/22 17:06	
cis-1,2-Dichloroethene	3.5	1.	0 ug/L		05/31/22 17:06	
cis-1,3-Dichloropropene	1.0 U	1.	0 ug/L		05/31/22 17:06	
Cyclohexane	1.0 U	1.	0 ug/L		05/31/22 17:06	
Chlorodibromomethane	1.0 U	1.	0 ug/L		05/31/22 17:06	
Dichlorodifluoromethane	1.0 U	1.	0 ug/L		05/31/22 17:06	
Ethylbenzene	1.0 U	1.	0 ug/L		05/31/22 17:06	
Isopropylbenzene	1.0 U	1.	0 ug/L		05/31/22 17:06	
Methyl acetate	10 U	1	0 ug/L		05/31/22 17:06	
Methyl tert-butyl ether	1.0 U	1.	0 ug/L		05/31/22 17:06	
Methylcyclohexane	1.0 U	1.	0 ug/L		05/31/22 17:06	
Methylene Chloride	5.0 U	5.	0 ug/L		05/31/22 17:06	
Styrene	1.0 U	1.	0 ug/L		05/31/22 17:06	
Tetrachloroethene	1.0 U	1.	0 ug/L		05/31/22 17:06	
Toluene	1.0 U	1.	0 ug/L		05/31/22 17:06	
trans-1,2-Dichloroethene	1.0 U	1.	0 ug/L		05/31/22 17:06	
trans-1,3-Dichloropropene	1.0 U	1.			05/31/22 17:06	
Trichloroethene	1.0 U	1.			05/31/22 17:06	
Trichlorofluoromethane	1.0 U	1.	0 ug/L		05/31/22 17:06	
Vinyl chloride	1.0 U		_		05/31/22 17:06	
Xylenes, Total	2.0 U		ŭ		05/31/22 17:06	

Eurofins Canton

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Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Client Sample ID: OW-28_051722 Lab Sample ID: 240-167051-7

Date Collected: 05/17/22 17:05 Date Received: 05/21/22 08:00

Matrix: Water

Job ID: 240-167051-1

Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	86		78 - 122	_		05/31/22 17:06	1
Dibromofluoromethane (Surr)	95		73 - 120			05/31/22 17:06	1
4-Bromofluorobenzene (Surr)	88		56 - 136			05/31/22 17:06	1
1,2-Dichloroethane-d4 (Surr)	94		62 - 137			05/31/22 17:06	1

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Client Sample ID: OW-18D_051822

Date Collected: 05/18/22 11:10 Date Received: 05/21/22 08:00

Lab Sample ID: 240-167051-8

Matrix: Water

Job ID: 240-167051-1

Analyte	Result	Qualifier	RL	Unit	D Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	1.0	U –	1.0	ug/L		05/31/22 17:31	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	ug/L		05/31/22 17:31	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	ug/L		05/31/22 17:31	
1,1,2-Trichloroethane	1.0	U	1.0	ug/L		05/31/22 17:31	
1,1-Dichloroethane	1.0	U	1.0	ug/L		05/31/22 17:31	
1,1-Dichloroethene	1.0	U	1.0	ug/L		05/31/22 17:31	
1,2,4-Trichlorobenzene	1.0	Ü	1.0	ug/L		05/31/22 17:31	
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	ug/L		05/31/22 17:31	
Ethylene Dibromide	1.0	U	1.0	ug/L		05/31/22 17:31	
1,2-Dichlorobenzene	1.0	U	1.0	ug/L		05/31/22 17:31	
1,2-Dichloroethane	1.0	U	1.0	ug/L		05/31/22 17:31	
1,2-Dichloropropane	1.0	U	1.0	ug/L		05/31/22 17:31	
1,3-Dichlorobenzene	1.0	U	1.0	ug/L		05/31/22 17:31	
1,4-Dichlorobenzene	1.0	U	1.0	ug/L		05/31/22 17:31	
2-Butanone (MEK)	10		10	ug/L		05/31/22 17:31	
2-Hexanone	10		10	ug/L		05/31/22 17:31	
4-Methyl-2-pentanone (MIBK)	10		10	ug/L		05/31/22 17:31	
Acetone	10	U	10	ug/L		05/31/22 17:31	
Benzene	1.0		1.0	ug/L		05/31/22 17:31	
Dichlorobromomethane	1.0		1.0	ug/L		05/31/22 17:31	
Bromoform	1.0		1.0	ug/L		05/31/22 17:31	
Bromomethane	1.0	. 	1.0	ug/L		05/31/22 17:31	
Carbon disulfide	1.0		1.0	ug/L		05/31/22 17:31	
Carbon tetrachloride	1.0		1.0	ug/L		05/31/22 17:31	
Chlorobenzene	1.0		1.0	ug/L		05/31/22 17:31	
Chloroethane	1.0		1.0	ug/L		05/31/22 17:31	
Chloroform	1.0		1.0	ug/L		05/31/22 17:31	
Chloromethane	1.0		1.0	ug/L		05/31/22 17:31	
cis-1,2-Dichloroethene	1.0		1.0	ug/L		05/31/22 17:31	
cis-1,3-Dichloropropene	1.0		1.0	ug/L		05/31/22 17:31	
Cyclohexane	1.0		1.0	ug/L		05/31/22 17:31	
Chlorodibromomethane	1.0		1.0	ug/L		05/31/22 17:31	
Dichlorodifluoromethane	1.0		1.0	ug/L		05/31/22 17:31	
Ethylbenzene	1.0		1.0	ug/L		05/31/22 17:31	
Isopropylbenzene	1.0		1.0	ug/L		05/31/22 17:31	
Methyl acetate	10		10	ug/L		05/31/22 17:31	
Methyl tert-butyl ether	1.0		1.0	ug/L		05/31/22 17:31	
Methylcyclohexane	1.0		1.0	ug/L		05/31/22 17:31	
Methylene Chloride	5.0		5.0	ug/L		05/31/22 17:31	
Styrene	1.0		1.0	ug/L		05/31/22 17:31	
Tetrachloroethene	1.0		1.0			05/31/22 17:31	
Toluene	1.0		1.0	ug/L ug/L		05/31/22 17:31	
trans-1,2-Dichloroethene	1.0					05/31/22 17:31	
•			1.0	ug/L			
trans-1,3-Dichloropropene	1.0		1.0	ug/L		05/31/22 17:31	
Trichlorofluoromethone	1.0		1.0	ug/L		05/31/22 17:31	
Trichlorofluoromethane	1.0		1.0	ug/L		05/31/22 17:31	
Vinyl chloride Xylenes, Total	1.0 2.0		1.0 2.0	ug/L ug/L		05/31/22 17:31 05/31/22 17:31	

Eurofins Canton

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Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Client Sample ID: OW-18D_051822 Lab Sample ID: 240-167051-8

Date Collected: 05/18/22 11:10 Date Received: 05/21/22 08:00

Matrix: Water

Job ID: 240-167051-1

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	86	78 - 122		05/31/22 17:31	1
Dibromofluoromethane (Surr)	96	73 - 120		05/31/22 17:31	1
4-Bromofluorobenzene (Surr)	89	56 ₋ 136		05/31/22 17:31	1
1,2-Dichloroethane-d4 (Surr)	93	62 - 137		05/31/22 17:31	1

Client: ZF Active Safety and Electronics LLC Job ID: 240-167051-1

Project/Site: Milford

Client Sample ID: OW-09-ML-D_051822

Date Collected: 05/18/22 12:10 Date Received: 05/21/22 08:00 Lab Sample ID: 240-167051-9

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	1.0	U	1.0	ug/L			05/31/22 17:55	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	ug/L			05/31/22 17:55	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	ug/L			05/31/22 17:55	
1,1,2-Trichloroethane	1.0	U	1.0	ug/L			05/31/22 17:55	
1,1-Dichloroethane	1.0	U	1.0	ug/L			05/31/22 17:55	
1,1-Dichloroethene	1.0	U	1.0	ug/L			05/31/22 17:55	
1,2,4-Trichlorobenzene	1.0	U	1.0	ug/L			05/31/22 17:55	
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	ug/L			05/31/22 17:55	
Ethylene Dibromide	1.0	U	1.0	ug/L			05/31/22 17:55	
1,2-Dichlorobenzene	1.0	U	1.0	ug/L			05/31/22 17:55	
1,2-Dichloroethane	1.0	U	1.0	ug/L			05/31/22 17:55	
1,2-Dichloropropane	1.0	U	1.0	ug/L			05/31/22 17:55	
1,3-Dichlorobenzene	1.0	U	1.0	ug/L			05/31/22 17:55	
1,4-Dichlorobenzene	1.0	U	1.0	ug/L			05/31/22 17:55	
2-Butanone (MEK)	10	U	10	ug/L			05/31/22 17:55	
2-Hexanone	10	U	10	ug/L			05/31/22 17:55	
4-Methyl-2-pentanone (MIBK)	10	U	10	ug/L			05/31/22 17:55	
Acetone	10	U	10	ug/L			05/31/22 17:55	
Benzene	1.0	U	1.0	ug/L			05/31/22 17:55	
Dichlorobromomethane	1.0	U	1.0	ug/L			05/31/22 17:55	
Bromoform	1.0	U	1.0	ug/L			05/31/22 17:55	
Bromomethane	1.0	U	1.0	ug/L			05/31/22 17:55	
Carbon disulfide	1.0	U	1.0	ug/L			05/31/22 17:55	
Carbon tetrachloride	1.0	U	1.0	ug/L			05/31/22 17:55	
Chlorobenzene	1.0	U	1.0	ug/L			05/31/22 17:55	
Chloroethane	1.0	U	1.0	ug/L			05/31/22 17:55	
Chloroform	1.0	U	1.0	ug/L			05/31/22 17:55	
Chloromethane	1.0	U	1.0	ug/L			05/31/22 17:55	
cis-1,2-Dichloroethene	8.1		1.0	ug/L			05/31/22 17:55	
cis-1,3-Dichloropropene	1.0	U	1.0	ug/L			05/31/22 17:55	
Cyclohexane	1.0	U	1.0	ug/L			05/31/22 17:55	
Chlorodibromomethane	1.0	U	1.0	ug/L			05/31/22 17:55	
Dichlorodifluoromethane	1.0	U	1.0	ug/L			05/31/22 17:55	
Ethylbenzene	1.0	U	1.0	ug/L			05/31/22 17:55	
Isopropylbenzene	1.0	U	1.0	ug/L			05/31/22 17:55	
Methyl acetate	10	U	10	ug/L			05/31/22 17:55	
Methyl tert-butyl ether	1.0		1.0	ug/L			05/31/22 17:55	
Methylcyclohexane	1.0		1.0	ug/L			05/31/22 17:55	
Methylene Chloride	5.0		5.0	ug/L			05/31/22 17:55	
Styrene	1.0		1.0	ug/L			05/31/22 17:55	
Tetrachloroethene	1.0	U	1.0	ug/L			05/31/22 17:55	
Toluene	1.0	U	1.0	ug/L			05/31/22 17:55	
trans-1,2-Dichloroethene	1.0		1.0	ug/L			05/31/22 17:55	
trans-1,3-Dichloropropene	1.0		1.0	ug/L			05/31/22 17:55	
Trichloroethene	1.0		1.0	ug/L			05/31/22 17:55	
Trichlorofluoromethane	1.0		1.0	ug/L			05/31/22 17:55	
Vinyl chloride	1.0		1.0	ug/L			05/31/22 17:55	
Xylenes, Total	2.0		2.0	ug/L			05/31/22 17:55	

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Client: ZF Active Safety and Electronics LLC Job ID: 240-167051-1

Project/Site: Milford

Date Received: 05/21/22 08:00

Lab Sample ID: 240-167051-9 Client Sample ID: OW-09-ML-D_051822

Date Collected: 05/18/22 12:10

Matrix: Water

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	84	78 - 122		05/31/22 17:55	1
Dibromofluoromethane (Surr)	91	73 - 120		05/31/22 17:55	1
4-Bromofluorobenzene (Surr)	85	56 ₋ 136		05/31/22 17:55	1
1,2-Dichloroethane-d4 (Surr)	89	62 - 137		05/31/22 17:55	1

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Trichloroethene

Vinyl chloride

Xylenes, Total

Trichlorofluoromethane

Client Sample ID: OW-09-ML-C_051822

Date Collected: 05/18/22 13:13 Date Received: 05/21/22 08:00 Lab Sample ID: 240-167051-10

Matrix: Water

Job ID: 240-167051-1

Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	ug/L			05/31/22 18:20	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	ug/L			05/31/22 18:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	ug/L			05/31/22 18:20	1
1,1,2-Trichloroethane	1.0	U	1.0	ug/L			05/31/22 18:20	1
1,1-Dichloroethane	1.0	U	1.0	ug/L			05/31/22 18:20	1
1,1-Dichloroethene	1.0	U	1.0	ug/L			05/31/22 18:20	1
1,2,4-Trichlorobenzene	1.0	U	1.0	ug/L			05/31/22 18:20	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	ug/L			05/31/22 18:20	•
Ethylene Dibromide	1.0	U	1.0	ug/L			05/31/22 18:20	•
1,2-Dichlorobenzene	1.0	U	1.0	ug/L			05/31/22 18:20	
1,2-Dichloroethane	1.0	U	1.0	ug/L			05/31/22 18:20	•
1,2-Dichloropropane	1.0	U	1.0	ug/L			05/31/22 18:20	•
1,3-Dichlorobenzene	1.0	U	1.0	ug/L			05/31/22 18:20	1
1,4-Dichlorobenzene	1.0	U	1.0	ug/L			05/31/22 18:20	
2-Butanone (MEK)	10	U	10	ug/L			05/31/22 18:20	
2-Hexanone	10	U	10	ug/L			05/31/22 18:20	
4-Methyl-2-pentanone (MIBK)	10	U	10	ug/L			05/31/22 18:20	
Acetone	10	U	10	ug/L			05/31/22 18:20	
Benzene	1.0		1.0	ug/L			05/31/22 18:20	
Dichlorobromomethane	1.0	U	1.0	ug/L			05/31/22 18:20	
Bromoform	1.0	U	1.0	ug/L			05/31/22 18:20	
Bromomethane	1.0		1.0	ug/L			05/31/22 18:20	· · · · · · · · · ·
Carbon disulfide	1.0	U	1.0	ug/L			05/31/22 18:20	
Carbon tetrachloride	1.0	U	1.0	ug/L			05/31/22 18:20	
Chlorobenzene	1.0	U	1.0	ug/L			05/31/22 18:20	
Chloroethane	1.0	U	1.0	ug/L			05/31/22 18:20	
Chloroform	1.0	U	1.0	ug/L			05/31/22 18:20	
Chloromethane	1.0	U	1.0	ug/L			05/31/22 18:20	
cis-1,2-Dichloroethene	3.8		1.0	ug/L			05/31/22 18:20	
cis-1,3-Dichloropropene	1.0	U	1.0	ug/L			05/31/22 18:20	
Cyclohexane	1.0		1.0	ug/L			05/31/22 18:20	
Chlorodibromomethane	1.0	U	1.0	ug/L			05/31/22 18:20	
Dichlorodifluoromethane	1.0	U	1.0	ug/L			05/31/22 18:20	
Ethylbenzene	1.0		1.0	ug/L			05/31/22 18:20	
Isopropylbenzene	1.0	U	1.0	ug/L			05/31/22 18:20	
Methyl acetate	10	U	10	ug/L			05/31/22 18:20	
Methyl tert-butyl ether	1.0		1.0	ug/L			05/31/22 18:20	
Methylcyclohexane	1.0		1.0	ug/L			05/31/22 18:20	
Methylene Chloride	5.0		5.0	ug/L			05/31/22 18:20	
Styrene	1.0		1.0	ug/L			05/31/22 18:20	
Tetrachloroethene	1.0		1.0	ug/L			05/31/22 18:20	
Toluene	1.0		1.0	ug/L			05/31/22 18:20	1
trans-1,2-Dichloroethene	1.0		1.0	ug/L			05/31/22 18:20	1
trans-1,3-Dichloropropene	1.0		1.0	ug/L			05/31/22 18:20	
		-	4.0	/i			05/04/00 40.00	

Eurofins Canton

05/31/22 18:20

05/31/22 18:20

05/31/22 18:20

05/31/22 18:20

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1.0

1.0

1.0

2.0

1.5

1.0 U

1.0 U

2.0 U

ug/L

ug/L

ug/L

ug/L

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Client: ZF Active Safety and Electronics LLC Job ID: 240-167051-1

Project/Site: Milford

Date Collected: 05/18/22 13:13 East Sample 15: 240-107-051-16

Date Collected: 05/18/22 13:13 Matrix: Water Date Received: 05/21/22 08:00

Surrogate	%Recovery Qu	ualifier Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	87	78 - 122		05/31/22 18:20	1
Dibromofluoromethane (Surr)	96	73 - 120		05/31/22 18:20	1
4-Bromofluorobenzene (Surr)	89	56 - 136		05/31/22 18:20	1
1,2-Dichloroethane-d4 (Surr)	95	62 - 137		05/31/22 18:20	1

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Client: ZF Active Safety and Electronics LLC Job ID: 240-167051-1

Project/Site: Milford

Client Sample ID: OW-18-ML-A_051822

Lab Sample ID: 240-167051-11

Date Collected: 05/18/22 14:55 **Matrix: Water** Date Received: 05/21/22 08:00

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	1.0	U	1.0	ug/L			05/31/22 18:45	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	ug/L			05/31/22 18:45	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	ug/L			05/31/22 18:45	
1,1,2-Trichloroethane	1.0	U	1.0	ug/L			05/31/22 18:45	
1,1-Dichloroethane	1.0	U	1.0	ug/L			05/31/22 18:45	
1,1-Dichloroethene	1.0	U	1.0	ug/L			05/31/22 18:45	
1,2,4-Trichlorobenzene	1.0	U	1.0	ug/L			05/31/22 18:45	
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	ug/L			05/31/22 18:45	
Ethylene Dibromide	1.0	U	1.0	ug/L			05/31/22 18:45	
1,2-Dichlorobenzene	1.0	U	1.0	ug/L			05/31/22 18:45	
1,2-Dichloroethane	1.0	U	1.0	ug/L			05/31/22 18:45	
1,2-Dichloropropane	1.0	U	1.0	ug/L			05/31/22 18:45	
1,3-Dichlorobenzene	1.0	U	1.0	ug/L			05/31/22 18:45	
1,4-Dichlorobenzene	1.0	U	1.0	ug/L			05/31/22 18:45	
2-Butanone (MEK)	10	U	10	ug/L			05/31/22 18:45	
2-Hexanone	10	U	10	ug/L			05/31/22 18:45	
4-Methyl-2-pentanone (MIBK)	10	U	10	ug/L			05/31/22 18:45	
Acetone	10	U	10	ug/L			05/31/22 18:45	
Benzene	1.0	U	1.0	ug/L			05/31/22 18:45	
Dichlorobromomethane	1.0	U	1.0	ug/L			05/31/22 18:45	
Bromoform	1.0	U	1.0	ug/L			05/31/22 18:45	
Bromomethane	1.0	U	1.0	ug/L			05/31/22 18:45	
Carbon disulfide	1.0	U	1.0	ug/L			05/31/22 18:45	
Carbon tetrachloride	1.0	U	1.0	ug/L			05/31/22 18:45	
Chlorobenzene	1.0	U	1.0	ug/L			05/31/22 18:45	
Chloroethane	1.0	U	1.0	ug/L			05/31/22 18:45	
Chloroform	1.0	U	1.0	ug/L			05/31/22 18:45	
Chloromethane	1.0	U	1.0	ug/L			05/31/22 18:45	
cis-1,2-Dichloroethene	1.3		1.0	ug/L			05/31/22 18:45	
cis-1,3-Dichloropropene	1.0	U	1.0	ug/L			05/31/22 18:45	
Cyclohexane	1.0	U	1.0	ug/L			05/31/22 18:45	
Chlorodibromomethane	1.0	U	1.0	ug/L			05/31/22 18:45	
Dichlorodifluoromethane	1.0	U	1.0	ug/L			05/31/22 18:45	
Ethylbenzene	1.0	U	1.0	ug/L			05/31/22 18:45	
Isopropylbenzene	1.0	U	1.0	ug/L			05/31/22 18:45	
Methyl acetate	10	U	10	ug/L			05/31/22 18:45	
Methyl tert-butyl ether	1.0		1.0	ug/L			05/31/22 18:45	
Methylcyclohexane	1.0		1.0	ug/L			05/31/22 18:45	
Methylene Chloride	5.0		5.0	ug/L			05/31/22 18:45	
Styrene	1.0		1.0	ug/L			05/31/22 18:45	
Tetrachloroethene	1.0		1.0	ug/L			05/31/22 18:45	
Toluene	1.0	U	1.0	ug/L			05/31/22 18:45	
rans-1,2-Dichloroethene	1.0		1.0	ug/L			05/31/22 18:45	
rans-1,3-Dichloropropene	1.0		1.0	ug/L			05/31/22 18:45	
Trichloroethene	1.0		1.0	ug/L			05/31/22 18:45	
Trichlorofluoromethane	1.0		1.0	ug/L			05/31/22 18:45	
Vinyl chloride	1.0		1.0	ug/L			05/31/22 18:45	
Xylenes, Total	2.0		2.0	ug/L			05/31/22 18:45	

Eurofins Canton

Client: ZF Active Safety and Electronics LLC Job ID: 240-167051-1

Project/Site: Milford

Date Received: 05/21/22 08:00

Lab Sample ID: 240-167051-11 Client Sample ID: OW-18-ML-A_051822

Date Collected: 05/18/22 14:55

Matrix: Water

Surrogate	%Recovery Qualifier	Limits	Prepare	ed Analyzed	Dil Fac
Toluene-d8 (Surr)	87	78 - 122		05/31/22 18:45	1
Dibromofluoromethane (Surr)	99	73 - 120		05/31/22 18:45	1
4-Bromofluorobenzene (Surr)	89	56 ₋ 136		05/31/22 18:45	1
1,2-Dichloroethane-d4 (Surr)	95	62 - 137		05/31/22 18:45	1

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Client Sample ID: OW-18-ML-B_051822

Date Collected: 05/18/22 15:33 Date Received: 05/21/22 08:00 Lab Sample ID: 240-167051-12

Matrix: Water

Job ID: 240-167051-1

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Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil F
1,1,1-Trichloroethane	1.0	U	1.0	ug/L			05/31/22 19:09	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	ug/L			05/31/22 19:09	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	ug/L			05/31/22 19:09	
1,1,2-Trichloroethane	1.0	U	1.0	ug/L			05/31/22 19:09	
1,1-Dichloroethane	1.0	U	1.0	ug/L			05/31/22 19:09	
1,1-Dichloroethene	1.0	U	1.0	ug/L			05/31/22 19:09	
1,2,4-Trichlorobenzene	1.0		1.0	ug/L			05/31/22 19:09	
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	ug/L			05/31/22 19:09	
Ethylene Dibromide	1.0	U	1.0	ug/L			05/31/22 19:09	
1,2-Dichlorobenzene	1.0		1.0	ug/L			05/31/22 19:09	
1,2-Dichloroethane	1.0	U	1.0	ug/L			05/31/22 19:09	
1,2-Dichloropropane	1.0	U	1.0	ug/L			05/31/22 19:09	
1,3-Dichlorobenzene	1.0		1.0	ug/L			05/31/22 19:09	
1,4-Dichlorobenzene	1.0		1.0	ug/L			05/31/22 19:09	
2-Butanone (MEK)	10		10	ug/L			05/31/22 19:09	
2-Hexanone	10		10	ug/L			05/31/22 19:09	
4-Methyl-2-pentanone (MIBK)	10		10	ug/L			05/31/22 19:09	
Acetone	10		10	ug/L			05/31/22 19:09	
Benzene	1.0		1.0	ug/L			05/31/22 19:09	
Dichlorobromomethane	1.0		1.0	ug/L			05/31/22 19:09	
Bromoform	1.0		1.0	ug/L			05/31/22 19:09	
Bromomethane	1.0		1.0				05/31/22 19:09	
	1.0		1.0	ug/L				
Carbon disulfide	1.0			ug/L			05/31/22 19:09	
Carbon tetrachloride			1.0	ug/L			05/31/22 19:09	
Chlorobenzene	1.0		1.0	ug/L			05/31/22 19:09	
Chloroethane	1.0		1.0	ug/L			05/31/22 19:09	
Chloroform	1.0		1.0	ug/L			05/31/22 19:09	
Chloromethane	1.0	U	1.0	ug/L			05/31/22 19:09	
cis-1,2-Dichloroethene	4.1		1.0	ug/L			05/31/22 19:09	
cis-1,3-Dichloropropene	1.0		1.0	ug/L			05/31/22 19:09	
Cyclohexane	1.0		1.0	ug/L			05/31/22 19:09	
Chlorodibromomethane	1.0		1.0	ug/L			05/31/22 19:09	
Dichlorodifluoromethane	1.0	.	1.0	ug/L			05/31/22 19:09	
Ethylbenzene	1.0		1.0	ug/L			05/31/22 19:09	
sopropylbenzene	1.0		1.0	ug/L			05/31/22 19:09	
Methyl acetate	10	U	10	ug/L			05/31/22 19:09	
Methyl tert-butyl ether	1.0	U	1.0	ug/L			05/31/22 19:09	
Methylcyclohexane	1.0	U	1.0	ug/L			05/31/22 19:09	
Methylene Chloride	5.0	U	5.0	ug/L			05/31/22 19:09	
Styrene	1.0	U	1.0	ug/L			05/31/22 19:09	
etrachloroethene	1.0	U	1.0	ug/L			05/31/22 19:09	
oluene	1.0	U	1.0	ug/L			05/31/22 19:09	
rans-1,2-Dichloroethene	1.0	U	1.0	ug/L			05/31/22 19:09	
rans-1,3-Dichloropropene	1.0	U	1.0	ug/L			05/31/22 19:09	
richloroethene richloroethene	1.0	U	1.0	ug/L			05/31/22 19:09	
Trichlorofluoromethane	1.0	U	1.0	ug/L			05/31/22 19:09	
/inyl chloride	1.0	U	1.0	ug/L			05/31/22 19:09	
Kylenes, Total	2.0	U	2.0	ug/L			05/31/22 19:09	

Client: ZF Active Safety and Electronics LLC Job ID: 240-167051-1

Project/Site: Milford

Date Collected: 05/18/22 15:33 East Sample 15: 240-107031-12

Date Collected: 05/18/22 15:33 Matrix: Water Date Received: 05/21/22 08:00

Surrogate	%Recovery	Qualifier	Limits	Prepared Analyzed	Dil Fac
Toluene-d8 (Surr)	83		78 - 122	05/31/22 19:09	1
Dibromofluoromethane (Surr)	95		73 - 120	05/31/22 19:09	1
4-Bromofluorobenzene (Surr)	86		56 - 136	05/31/22 19:09	1
1,2-Dichloroethane-d4 (Surr)	91		62 - 137	05/31/22 19:09	1

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Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Client Sample ID: OW-18-ML-C_051922

Date Collected: 05/19/22 09:46 Date Received: 05/21/22 08:00 Lab Sample ID: 240-167051-13

Matrix: Water

Job ID: 240-167051-1

•	Water	
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		RL	Unit	D	Prepared	Analyzed	Dil Fac
1.0	U	1.0	ug/L			05/31/22 19:34	
1.0	U	1.0	ug/L			05/31/22 19:34	•
1.0	U	1.0	ug/L			05/31/22 19:34	•
1.0	U	1.0	ug/L			05/31/22 19:34	
1.0	U	1.0	ug/L			05/31/22 19:34	
1.0	U	1.0	ug/L			05/31/22 19:34	
1.0	U	1.0	ug/L			05/31/22 19:34	
2.0	U	2.0	ug/L			05/31/22 19:34	
1.0	U	1.0	ug/L			05/31/22 19:34	
1.0	U	1.0	ug/L			05/31/22 19:34	
1.0	U	1.0				05/31/22 19:34	
1.0	U	1.0	ug/L			05/31/22 19:34	
1.0	U	1.0	ug/L			05/31/22 19:34	
1.0	U	1.0	•			05/31/22 19:34	
		10	_			05/31/22 19:34	
10		10				05/31/22 19:34	
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	U	1.0 2.0	ug/L ug/L			05/31/22 19:34 05/31/22 19:34	
	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U	1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0	1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 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Client: ZF Active Safety and Electronics LLC Job ID: 240-167051-1

Project/Site: Milford

Date Collected: 05/19/22 09:46 Lab Gample 15: 240-107031-13

Date Received: 05/21/22 08:00

Surrogate	%Recovery Qualifier	Limits	Prepared Analyzed	Dil Fac
Toluene-d8 (Surr)	87	78 - 122	05/31/22 19:34	1 1
Dibromofluoromethane (Surr)	97	73 - 120	05/31/22 19:34	1 1
4-Bromofluorobenzene (Surr)	89	56 ₋ 136	05/31/22 19:34	1 1
1,2-Dichloroethane-d4 (Surr)	96	62 - 137	05/31/22 19:34	1

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Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Client Sample ID: OW-18-ML-D_051922

Date Collected: 05/19/22 10:55
Date Received: 05/21/22 08:00

Lab Sample ID: 240-167051-14

Matrix: Water

Job ID: 240-167051-1

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Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
,1,1-Trichloroethane	1.0	U	1.0	ug/L			05/31/22 20:14	
I,1,2,2-Tetrachloroethane	1.0	U	1.0	ug/L			05/31/22 20:14	
I,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	ug/L			05/31/22 20:14	
I,1,2-Trichloroethane	1.0	U	1.0	ug/L			05/31/22 20:14	
I,1-Dichloroethane	1.2		1.0	ug/L			05/31/22 20:14	
I,1-Dichloroethene	1.0	U	1.0	ug/L			05/31/22 20:14	
I,2,4-Trichlorobenzene	1.0	U	1.0	ug/L			05/31/22 20:14	
I,2-Dibromo-3-Chloropropane	2.0	U	2.0	ug/L			05/31/22 20:14	
Ethylene Dibromide	1.0	U	1.0	ug/L			05/31/22 20:14	
1,2-Dichlorobenzene	1.0	U	1.0	ug/L			05/31/22 20:14	
I,2-Dichloroethane	1.0	U	1.0	ug/L			05/31/22 20:14	
I,2-Dichloropropane	1.0	U	1.0	ug/L			05/31/22 20:14	
I,3-Dichlorobenzene	1.0	U	1.0	ug/L			05/31/22 20:14	
I,4-Dichlorobenzene	1.0	U	1.0	ug/L			05/31/22 20:14	
2-Butanone (MEK)	10		10	ug/L			05/31/22 20:14	
2-Hexanone	10	U	10	ug/L			05/31/22 20:14	
I-Methyl-2-pentanone (MIBK)	10		10	ug/L			05/31/22 20:14	
Acetone	10		10	ug/L			05/31/22 20:14	
Benzene	1.0		1.0	ug/L			05/31/22 20:14	
Dichlorobromomethane	1.0	_	1.0	ug/L			05/31/22 20:14	
Bromoform	1.0		1.0	ug/L			05/31/22 20:14	
Bromomethane	1.0		1.0	ug/L			05/31/22 20:14	
Carbon disulfide	1.0		1.0	ug/L			05/31/22 20:14	
Carbon tetrachloride	1.0		1.0	ug/L			05/31/22 20:14	
Chlorobenzene	1.0		1.0	ug/L			05/31/22 20:14	
Chloroethane	1.0		1.0	ug/L			05/31/22 20:14	
Chloroform	1.0		1.0	ug/L			05/31/22 20:14	
Chloromethane	1.0		1.0	ug/L			05/31/22 20:14	
cis-1,2-Dichloroethene	7.0	O	1.0	ug/L			05/31/22 20:14	
cis-1,3-Dichloropropene	1.0	H	1.0	ug/L			05/31/22 20:14	
Cyclohexane	1.0		1.0	ug/L			05/31/22 20:14	
Chlorodibromomethane	1.0		1.0	ug/L			05/31/22 20:14	
Dichlorodifluoromethane	1.0		1.0	ug/L			05/31/22 20:14	
Ethylbenzene	1.0		1.0	ug/L			05/31/22 20:14	
sopropylbenzene	1.0		1.0	ug/L			05/31/22 20:14	
	1.0		1.0					
Methyl acetate Methyl tert-butyl ether	1.0		1.0	ug/L ug/L			05/31/22 20:14 05/31/22 20:14	
Methylcyclohexane	1.0 5.0		1.0	ug/L			05/31/22 20:14	
Methylene Chloride			5.0	ug/L			05/31/22 20:14	
Styrene	1.0		1.0	ug/L			05/31/22 20:14	
Tetrachloroethene	1.0		1.0	ug/L			05/31/22 20:14	
Foluene	1.0		1.0	ug/L			05/31/22 20:14	
rans-1,2-Dichloroethene	1.0		1.0	ug/L			05/31/22 20:14	
rans-1,3-Dichloropropene	1.0		1.0	ug/L			05/31/22 20:14	
Frichloroethene	1.0		1.0	ug/L			05/31/22 20:14	
Frichlorofluoromethane	1.0		1.0	ug/L			05/31/22 20:14	
/inyl chloride Kylenes, Total	1.0 2.0		1.0 2.0	ug/L ug/L			05/31/22 20:14 05/31/22 20:14	

Client: ZF Active Safety and Electronics LLC Job ID: 240-167051-1

Project/Site: Milford

Date Received: 05/21/22 08:00

Lab Sample ID: 240-167051-14 Client Sample ID: OW-18-ML-D_051922

Date Collected: 05/19/22 10:55

Matrix: Water

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	103	78 - 122		05/31/22 20:14	1
Dibromofluoromethane (Surr)	98	73 - 120		05/31/22 20:14	1
4-Bromofluorobenzene (Surr)	97	56 ₋ 136		05/31/22 20:14	1
1,2-Dichloroethane-d4 (Surr)	106	62 - 137		05/31/22 20:14	1

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Client Sample ID: OW-18-ML-E_051922

Date Collected: 05/19/22 12:46 Date Received: 05/21/22 08:00 Lab Sample ID: 240-167051-15

Matrix: Water

Job ID: 240-167051-1

Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	ug/L			06/02/22 16:23	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	ug/L			06/02/22 16:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	ug/L			06/02/22 16:23	1
1,1,2-Trichloroethane	1.0	U	1.0	ug/L			06/02/22 16:23	1
1,1-Dichloroethane	1.4		1.0	ug/L			06/02/22 16:23	1
1,1-Dichloroethene	1.0	U	1.0	ug/L			06/02/22 16:23	1
1,2,4-Trichlorobenzene	1.0	U	1.0	ug/L			06/02/22 16:23	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	ug/L			06/02/22 16:23	1
Ethylene Dibromide	1.0	U	1.0	ug/L			06/02/22 16:23	1
1,2-Dichlorobenzene	1.0	U	1.0	ug/L			06/02/22 16:23	1
1,2-Dichloroethane	1.0	U	1.0	ug/L			06/02/22 16:23	1
1,2-Dichloropropane	1.0	U	1.0	ug/L			06/02/22 16:23	1
1,3-Dichlorobenzene	1.0	U	1.0	ug/L			06/02/22 16:23	1
1,4-Dichlorobenzene	1.0	U	1.0	ug/L			06/02/22 16:23	1
2-Butanone (MEK)	10	U	10	ug/L			06/02/22 16:23	1
2-Hexanone	10	U	10	ug/L			06/02/22 16:23	1
4-Methyl-2-pentanone (MIBK)	10	U	10	ug/L			06/02/22 16:23	1
Acetone	10	U	10	ug/L			06/02/22 16:23	1
Benzene	1.0		1.0	ug/L			06/02/22 16:23	1
Dichlorobromomethane	1.0	U	1.0	ug/L			06/02/22 16:23	1
Bromoform	1.0	U	1.0	ug/L			06/02/22 16:23	1
Bromomethane	1.0		1.0	ug/L			06/02/22 16:23	1
Carbon disulfide	1.0	U	1.0	ug/L			06/02/22 16:23	1
Carbon tetrachloride	1.0	U	1.0	ug/L			06/02/22 16:23	1
Chlorobenzene	1.0		1.0	ug/L			06/02/22 16:23	1
Chloroethane	1.0	U	1.0	ug/L			06/02/22 16:23	1
Chloroform	1.0	U	1.0	ug/L			06/02/22 16:23	1
Chloromethane	1.0		1.0	ug/L			06/02/22 16:23	1
cis-1,2-Dichloroethene	7.5		1.0	ug/L			06/02/22 16:23	1
cis-1,3-Dichloropropene	1.0	U	1.0	ug/L			06/02/22 16:23	1
Cyclohexane	1.0		1.0	ug/L			06/02/22 16:23	1
Chlorodibromomethane	1.0	U	1.0	ug/L			06/02/22 16:23	1
Dichlorodifluoromethane	1.0	U	1.0	ug/L			06/02/22 16:23	1
Ethylbenzene	1.0		1.0	ug/L			06/02/22 16:23	1
Isopropylbenzene	1.0		1.0	ug/L			06/02/22 16:23	1
Methyl acetate	10	U	10	ug/L			06/02/22 16:23	1
Methyl tert-butyl ether	1.0		1.0	ug/L			06/02/22 16:23	1
Methylcyclohexane	1.0		1.0	ug/L			06/02/22 16:23	1
Methylene Chloride	5.0		5.0	ug/L			06/02/22 16:23	1
Styrene	1.0		1.0	ug/L			06/02/22 16:23	1
Tetrachloroethene	1.0		1.0	ug/L			06/02/22 16:23	1
Toluene	1.0		1.0	ug/L			06/02/22 16:23	1
trans-1,2-Dichloroethene	1.0		1.0	ug/L			06/02/22 16:23	· 1
trans-1,3-Dichloropropene	1.0		1.0	ug/L			06/02/22 16:23	1
Trichloroethene	1.0		1.0	ug/L			06/02/22 16:23	1
Trichlorofluoromethane	1.0		1.0	ug/L			06/02/22 16:23	· 1
Vinyl chloride	1.0		1.0	ug/L			06/02/22 16:23	1
Xylenes, Total	2.0		2.0	ug/L			06/02/22 16:23	1

Eurofins Canton

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6/7/2022

Client: ZF Active Safety and Electronics LLC Job ID: 240-167051-1

Project/Site: Milford

Date Received: 05/21/22 08:00

Lab Sample ID: 240-167051-15 Client Sample ID: OW-18-ML-E_051922

Date Collected: 05/19/22 12:46 **Matrix: Water**

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	110	78 - 122		06/02/22 16:23	1
Dibromofluoromethane (Surr)	110	73 - 120		06/02/22 16:23	1
4-Bromofluorobenzene (Surr)	98	56 ₋ 136		06/02/22 16:23	1
1,2-Dichloroethane-d4 (Surr)	100	62 - 137		06/02/22 16:23	1

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Xylenes, Total

Client Sample ID: OW-18-ML-F_051922

Date Collected: 05/19/22 13:52 Date Received: 05/21/22 08:00 Lab Sample ID: 240-167051-16

Matrix: Water

Job ID: 240-167051-1

Method: 8260D - Volatile Organ Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	1.0	U	1.0	ug/L		-	06/02/22 16:47	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	ug/L			06/02/22 16:47	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	ug/L			06/02/22 16:47	
1,1,2-Trichloroethane	1.0	U	1.0	ug/L			06/02/22 16:47	
1,1-Dichloroethane	1.0	U	1.0	ug/L			06/02/22 16:47	
1,1-Dichloroethene	1.0	U	1.0	ug/L			06/02/22 16:47	
1,2,4-Trichlorobenzene	1.0	U	1.0	ug/L			06/02/22 16:47	
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	ug/L			06/02/22 16:47	
Ethylene Dibromide	1.0	U	1.0	ug/L			06/02/22 16:47	
1,2-Dichlorobenzene	1.0	U	1.0	ug/L			06/02/22 16:47	
1,2-Dichloroethane	1.0	U	1.0	ug/L			06/02/22 16:47	
1,2-Dichloropropane	1.0	U	1.0	ug/L			06/02/22 16:47	
1,3-Dichlorobenzene	1.0	U	1.0	ug/L			06/02/22 16:47	
1,4-Dichlorobenzene	1.0	U	1.0	ug/L			06/02/22 16:47	
2-Butanone (MEK)	10	U	10	ug/L			06/02/22 16:47	
2-Hexanone	10	U	10	ug/L			06/02/22 16:47	
4-Methyl-2-pentanone (MIBK)	10	U	10	ug/L			06/02/22 16:47	
Acetone	10	U	10	ug/L			06/02/22 16:47	
Benzene	1.0	U	1.0	ug/L			06/02/22 16:47	
Dichlorobromomethane	1.0	U	1.0	ug/L			06/02/22 16:47	
Bromoform	1.0	U	1.0	ug/L			06/02/22 16:47	
Bromomethane	1.0		1.0	ug/L			06/02/22 16:47	
Carbon disulfide	1.0	U	1.0	ug/L			06/02/22 16:47	
Carbon tetrachloride	1.0	U	1.0	ug/L			06/02/22 16:47	
Chlorobenzene	1.0	U	1.0	ug/L			06/02/22 16:47	
Chloroethane	1.0	U	1.0	ug/L			06/02/22 16:47	
Chloroform	1.0	U	1.0	ug/L			06/02/22 16:47	
Chloromethane	1.0	U	1.0	ug/L			06/02/22 16:47	
cis-1,2-Dichloroethene	14		1.0	ug/L			06/02/22 16:47	
cis-1,3-Dichloropropene	1.0	U	1.0	ug/L			06/02/22 16:47	
Cyclohexane	1.0	U	1.0	ug/L			06/02/22 16:47	
Chlorodibromomethane	1.0	U	1.0	ug/L			06/02/22 16:47	
Dichlorodifluoromethane	1.0	U	1.0	ug/L			06/02/22 16:47	
Ethylbenzene	1.0	U	1.0	ug/L			06/02/22 16:47	
Isopropylbenzene	1.0	U	1.0	ug/L			06/02/22 16:47	
Methyl acetate	10	U	10	ug/L			06/02/22 16:47	
Methyl tert-butyl ether	1.0	U	1.0	ug/L			06/02/22 16:47	
Methylcyclohexane	1.0	U	1.0	ug/L			06/02/22 16:47	
Methylene Chloride	5.0	U	5.0	ug/L			06/02/22 16:47	
Styrene	1.0	U	1.0	ug/L			06/02/22 16:47	
Tetrachloroethene	1.0	U	1.0	ug/L			06/02/22 16:47	
Toluene	1.0	U	1.0	ug/L			06/02/22 16:47	
trans-1,2-Dichloroethene	1.4		1.0	ug/L			06/02/22 16:47	
trans-1,3-Dichloropropene	1.0	U	1.0	ug/L			06/02/22 16:47	
Trichloroethene	1.0	U	1.0	ug/L			06/02/22 16:47	
Trichlorofluoromethane	1.0		1.0	ug/L			06/02/22 16:47	
Vinyl chloride	1.0		1.0	ug/L			06/02/22 16:47	1
Volume Tetal	0.0	11	0.0	/!			00/00/00 40:47	

Eurofins Canton

06/02/22 16:47

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ug/L

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6/7/2022

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Client: ZF Active Safety and Electronics LLC Job ID: 240-167051-1

Project/Site: Milford

Date Received: 05/21/22 08:00

Lab Sample ID: 240-167051-16 Client Sample ID: OW-18-ML-F_051922

Date Collected: 05/19/22 13:52

Matrix: Water

	Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
'	Toluene-d8 (Surr)	107		78 - 122	_	-	06/02/22 16:47	1
	Dibromofluoromethane (Surr)	108		73 - 120			06/02/22 16:47	1
.	4-Bromofluorobenzene (Surr)	97		56 - 136			06/02/22 16:47	1
	1,2-Dichloroethane-d4 (Surr)	101		62 - 137			06/02/22 16:47	1

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Trichloroethene

Vinyl chloride

Xylenes, Total

Trichlorofluoromethane

Client Sample ID: OW-02D2_051922

Date Collected: 05/19/22 16:03 Date Received: 05/21/22 08:00 Job ID: 240-167051-1

Lab Sample ID: 240-167051-17

Matrix: Water

Analyte		Qualifier	RL	Unit	D Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	2.5	U	2.5	ug/L		06/02/22 17:10	2.5
1,1,2,2-Tetrachloroethane	2.5	U	2.5	ug/L		06/02/22 17:10	2.5
1,1,2-Trichloro-1,2,2-trifluoroethane	2.5	U	2.5	ug/L		06/02/22 17:10	2.5
1,1,2-Trichloroethane	2.5	U	2.5	ug/L		06/02/22 17:10	2.5
1,1-Dichloroethane	2.5	U	2.5	ug/L		06/02/22 17:10	2.5
1,1-Dichloroethene	2.5	U	2.5	ug/L		06/02/22 17:10	2.5
1,2,4-Trichlorobenzene	2.5	U	2.5	ug/L		06/02/22 17:10	2.5
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	ug/L		06/02/22 17:10	2.5
Ethylene Dibromide	2.5	U	2.5	ug/L		06/02/22 17:10	2.5
1,2-Dichlorobenzene	2.5	U	2.5	ug/L		06/02/22 17:10	2.5
1,2-Dichloroethane	2.5	U	2.5	ug/L		06/02/22 17:10	2.5
1,2-Dichloropropane	2.5	U	2.5	ug/L		06/02/22 17:10	2.5
1,3-Dichlorobenzene	2.5	U	2.5	ug/L		06/02/22 17:10	2.5
1,4-Dichlorobenzene	2.5	U	2.5	ug/L		06/02/22 17:10	2.5
2-Butanone (MEK)	25	U	25	ug/L		06/02/22 17:10	2.5
2-Hexanone	25		25	ug/L		06/02/22 17:10	2.5
4-Methyl-2-pentanone (MIBK)	25	U	25	ug/L		06/02/22 17:10	2.5
Acetone	25	U	25	ug/L		06/02/22 17:10	2.5
Benzene	2.5		2.5	ug/L		06/02/22 17:10	2.5
Dichlorobromomethane	2.5	U	2.5	ug/L		06/02/22 17:10	2.5
Bromoform	2.5	U	2.5	ug/L		06/02/22 17:10	2.5
Bromomethane	2.5		2.5	ug/L		06/02/22 17:10	2.5
Carbon disulfide	2.5		2.5	ug/L		06/02/22 17:10	2.5
Carbon tetrachloride	2.5	U	2.5	ug/L		06/02/22 17:10	2.5
Chlorobenzene	2.5		2.5	ug/L		06/02/22 17:10	2.5
Chloroethane	2.5		2.5	ug/L		06/02/22 17:10	2.5
Chloroform	2.5		2.5	ug/L		06/02/22 17:10	2.5
Chloromethane	2.5		2.5	ug/L		06/02/22 17:10	2.5
cis-1,2-Dichloroethene	2.5		2.5	ug/L		06/02/22 17:10	2.5
cis-1,3-Dichloropropene	2.5		2.5	ug/L		06/02/22 17:10	2.5
Cyclohexane	2.5		2.5	ug/L		06/02/22 17:10	2.5
Chlorodibromomethane	2.5		2.5	ug/L		06/02/22 17:10	2.5
Dichlorodifluoromethane	2.5		2.5	ug/L		06/02/22 17:10	2.5
Ethylbenzene	2.5		2.5	ug/L		06/02/22 17:10	2.5
Isopropylbenzene	2.5		2.5	ug/L		06/02/22 17:10	2.5
Methyl acetate	25		25	ug/L		06/02/22 17:10	2.5
Methyl tert-butyl ether	2.5		2.5	ug/L		06/02/22 17:10	2.5
Methylcyclohexane	2.5		2.5	ug/L		06/02/22 17:10	2.5
Methylene Chloride	13		13	ug/L ug/L		06/02/22 17:10	2.5
Styrene	2.5		2.5	ug/L		06/02/22 17:10	2.5
Tetrachloroethene	5.9	J	2.5	ug/L ug/L		06/02/22 17:10	2.5
Toluene	2.5	П	2.5	ug/L ug/L		06/02/22 17:10	2.5
trans-1,2-Dichloroethene							
trans-1,2-Dichloropetnene	2.5		2.5	ug/L		06/02/22 17:10	2.5
пань-т,о-интионоргорене	2.5	U	2.5	ug/L		06/02/22 17:10	2.5

Eurofins Canton

06/02/22 17:10

06/02/22 17:10

06/02/22 17:10

06/02/22 17:10

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Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Date Collected: 05/19/22 16:03 Lab Gample 1B: 240-107031-17

Date Received: 05/21/22 08:00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	108		78 - 122		06/02/22 17:10	2.5
Dibromofluoromethane (Surr)	108		73 - 120		06/02/22 17:10	2.5
4-Bromofluorobenzene (Surr)	98		56 - 136		06/02/22 17:10	2.5
1,2-Dichloroethane-d4 (Surr)	99		62 - 137		06/02/22 17:10	2.5

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Job ID: 240-167051-1

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Prepared

Client: ZF Active Safety and Electronics LLC

Method: 8260D - Volatile Organic Compounds by GC/MS

Result Qualifier

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Project/Site: Milford

1,1,1-Trichloroethane

1,1,2-Trichloroethane

1.1-Dichloroethane

1.1-Dichloroethene

Ethylene Dibromide

1,2-Dichlorobenzene

1,2-Dichloroethane

1,2-Dichloropropane

1,3-Dichlorobenzene

1,4-Dichlorobenzene

4-Methyl-2-pentanone (MIBK)

Dichlorobromomethane

2-Butanone (MEK)

2-Hexanone

Acetone

Benzene

Bromoform

Bromomethane

Carbon disulfide

Chlorobenzene

Chloromethane

Cyclohexane

Ethylbenzene

Methyl acetate

Styrene

Toluene

Isopropylbenzene

Methyl tert-butyl ether

Methylcyclohexane

Methylene Chloride

Tetrachloroethene

Trichloroethene

Vinyl chloride

Xylenes, Total

trans-1,2-Dichloroethene

Trichlorofluoromethane

trans-1,3-Dichloropropene

cis-1,2-Dichloroethene

cis-1,3-Dichloropropene

Chlorodibromomethane

Dichlorodifluoromethane

Chloroethane

Chloroform

Carbon tetrachloride

1,2,4-Trichlorobenzene

1,2-Dibromo-3-Chloropropane

1,1,2,2-Tetrachloroethane

Analyte

Client Sample ID: OW-22 052022

Date Collected: 05/20/22 08:47 Date Received: 05/21/22 08:00

1,1,2-Trichloro-1,2,2-trifluoroethane

Lab Sample ID: 240-167051-18

Matrix: Water

Analyzed

06/03/22 17:59

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Job ID: 240-167051-1

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Eurofins Canton

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Date Collected: 05/20/22 08:47
Date Received: 05/21/22 08:00

Matrix: Water

Job ID: 240-167051-1

Surroga	ate	%Recovery	Qualifier	Limits	ı	Prepared	Analyzed	Dil Fac
Toluene	-d8 (Surr)	90		78 - 122			06/03/22 17:59	2.5
Dibromo	ofluoromethane (Surr)	102		73 - 120			06/03/22 17:59	2.5
4-Bromo	ofluorobenzene (Surr)	93		56 - 136			06/03/22 17:59	2.5
1,2-Dich	nloroethane-d4 (Surr)	98		62 - 137			06/03/22 17:59	2.5

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Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Client Sample ID: OW-07D_052022

Date Collected: 05/20/22 10:25 Date Received: 05/21/22 08:00

Lab Sample ID: 240-167051-19

Matrix:	Water

Job ID: 240-167051-1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	1.0	U	1.0	ug/L		-	06/03/22 18:23	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	ug/L			06/03/22 18:23	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	ug/L			06/03/22 18:23	
1,1,2-Trichloroethane	1.0	U	1.0	ug/L			06/03/22 18:23	
1,1-Dichloroethane	1.0	U	1.0	ug/L			06/03/22 18:23	
1,1-Dichloroethene	1.0	U	1.0	ug/L			06/03/22 18:23	
1,2,4-Trichlorobenzene	1.0	U	1.0	ug/L			06/03/22 18:23	
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	ug/L			06/03/22 18:23	
Ethylene Dibromide	1.0	U	1.0	ug/L			06/03/22 18:23	
1,2-Dichlorobenzene	1.0	U	1.0	ug/L			06/03/22 18:23	
1,2-Dichloroethane	1.0	U	1.0	ug/L			06/03/22 18:23	
1,2-Dichloropropane	1.0	U	1.0	ug/L			06/03/22 18:23	
1,3-Dichlorobenzene	1.0	U	1.0	ug/L			06/03/22 18:23	
1,4-Dichlorobenzene	1.0	U	1.0	ug/L			06/03/22 18:23	
2-Butanone (MEK)	10		10	ug/L			06/03/22 18:23	
2-Hexanone	10	U	10	ug/L			06/03/22 18:23	
4-Methyl-2-pentanone (MIBK)	10	U	10	ug/L			06/03/22 18:23	
Acetone	10		10	ug/L			06/03/22 18:23	
Benzene	1.0	Ü	1.0	ug/L			06/03/22 18:23	
Dichlorobromomethane	1.0	_	1.0	ug/L			06/03/22 18:23	
Bromoform	1.0		1.0	ug/L			06/03/22 18:23	
Bromomethane	1.0		1.0	ug/L			06/03/22 18:23	
Carbon disulfide	1.0		1.0	ug/L			06/03/22 18:23	
Carbon tetrachloride	1.0		1.0	ug/L			06/03/22 18:23	
Chlorobenzene	1.0		1.0	ug/L			06/03/22 18:23	
Chloroethane	1.0		1.0	ug/L			06/03/22 18:23	
Chloroform	1.0		1.0	ug/L			06/03/22 18:23	
Chloromethane	1.0		1.0	ug/L			06/03/22 18:23	
cis-1,2-Dichloroethene	1.0		1.0	ug/L			06/03/22 18:23	
cis-1,3-Dichloropropene	1.0		1.0	ug/L			06/03/22 18:23	
Cyclohexane	1.0		1.0	ug/L			06/03/22 18:23	
Chlorodibromomethane	1.0		1.0	ug/L			06/03/22 18:23	
Dichlorodifluoromethane	1.0		1.0	ug/L			06/03/22 18:23	
Ethylbenzene	1.0		1.0	ug/L			06/03/22 18:23	
sopropylbenzene	1.0		1.0	ug/L			06/03/22 18:23	
Methyl acetate	1.0		10	ug/L			06/03/22 18:23	
Methyl tert-butyl ether	1.0		1.0	ug/L			06/03/22 18:23	
	1.0		1.0				06/03/22 18:23	
Methylogo Chlorido	5.0		5.0	ug/L			06/03/22 18:23	
Methylene Chloride	1.0			ug/L			06/03/22 18:23	
Styrene	1.0		1.0	ug/L				
Tetrachloroethene			1.0	ug/L			06/03/22 18:23	
Toluene	1.0		1.0	ug/L			06/03/22 18:23	
rans-1,2-Dichloroethene	1.0		1.0	ug/L			06/03/22 18:23	
rans-1,3-Dichloropropene	1.0		1.0	ug/L			06/03/22 18:23	
Frichloroethene	1.0		1.0	ug/L			06/03/22 18:23	
Trichlorofluoromethane	1.0		1.0	ug/L			06/03/22 18:23	
Vinyl chloride	1.0		1.0	ug/L			06/03/22 18:23	
Xylenes, Total	2.0	U	2.0	ug/L			06/03/22 18:23	

Eurofins Canton

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Date Collected: 05/20/22 10:25

Matrix: Water

Job ID: 240-167051-1

Date Received: 05/21/22 08:00

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	90	78 - 122		06/03/22 18:23	1
Dibromofluoromethane (Surr)	105	73 - 120		06/03/22 18:23	1
4-Bromofluorobenzene (Surr)	93	56 ₋ 136		06/03/22 18:23	1
1,2-Dichloroethane-d4 (Surr)	102	62 - 137		06/03/22 18:23	1

3

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40

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Client Sample ID: DUP-01_052022

Date Collected: 05/20/22 00:00 Date Received: 05/21/22 08:00

Lab Sample ID: 240-167051-20

Matrix: Water

Job ID: 240-167051-1

1.0 1.0 1.0 1.0 1.0 1.0 2.0 1.0 1.0	U U U U U U	1.0 1.0 1.0 1.0 1.0 1.0	ug/L ug/L ug/L ug/L ug/L ug/L			06/03/22 18:48 06/03/22 18:48 06/03/22 18:48	
1.0 1.0 1.0 1.0 2.0 1.0 1.0	U U U U U	1.0 1.0 1.0 1.0	ug/L ug/L ug/L				
1.0 1.0 1.0 2.0 1.0 1.0	U U U U	1.0 1.0 1.0 1.0	ug/L ug/L			06/03/22 18:48	
1.0 1.0 1.0 2.0 1.0 1.0	U U U	1.0 1.0 1.0	ug/L				
1.0 1.0 2.0 1.0 1.0	U U U	1.0 1.0	_			06/03/22 18:48	
1.0 2.0 1.0 1.0 1.0	U	1.0	ug/L			06/03/22 18:48	
2.0 1.0 1.0 1.0	U					06/03/22 18:48	
1.0 1.0 1.0		2.0	ug/L			06/03/22 18:48	
1.0 1.0	U	2.0	ug/L			06/03/22 18:48	
1.0		1.0	ug/L			06/03/22 18:48	
	U	1.0	ug/L			06/03/22 18:48	
1.0	U	1.0	ug/L			06/03/22 18:48	
	U	1.0	ug/L			06/03/22 18:48	
1.0		1.0	ug/L			06/03/22 18:48	
1.0		1.0	ug/L			06/03/22 18:48	
10	U	10	ug/L			06/03/22 18:48	
10		10	ug/L			06/03/22 18:48	
10		10	ug/L			06/03/22 18:48	
10		10	ug/L			06/03/22 18:48	
1.0		1.0	ug/L			06/03/22 18:48	
			_				
			_				
							
			_				
			-				
							
			-				
			-				
	U		_				
	11		-				
			-				
			_				
			_				
1.0	U	1.0	ug/L			UE/U3/33 18·10	
	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U	1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0 1.0 U 1.0	1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L	1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L	1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L 1.0 U 1.0 ug/L	1.0 U 1.0 ug/L 06/03/22 18:48 1.0 U 1.0 ug/L 06/03/22 18:48 1.0 U 1.0 ug/L 06/03/22 18:48 1.0 U 1.0 ug/L 06/03/22 18:48 1.0 U 1.0 ug/L 06/03/22 18:48 1.0 U 1.0 ug/L 06/03/22 18:48 1.0 U 1.0 ug/L 06/03/22 18:48 1.0 U 1.0 ug/L 06/03/22 18:48 1.0 U 1.0 ug/L 06/03/22 18:48 1.0 U 1.0 ug/L 06/03/22 18:48 1.0 U 1.0 ug/L 06/03/22 18:48 1.0 U 1.0 ug/L 06/03/22 18:48 1.0 U 1.0 ug/L 06/03/22 18:48 1.0 U 1.0 ug/L 06/03/22 18:48 1.0 U 1.0 ug/L 06/03/22 18:48 1.0 U 1.0 ug/L 06/03/22 18:48 1.0 U 1.0 ug/L 06/03/22 18:48 1.0 U 1.0 ug/L 06/03/22 18:48 1.0 U 1.0 ug/L 06/03/22 18:48 1.0 U 1.0 ug/L 06/03/22 18:48 1.0 U 1.0 ug/L 06/03/22 18:48 1.0 U 1.0 ug/L 06/03/22 18:48 1.0 U 1.0 ug/L 06/03/22 18:48 1.0 U 1.0 ug/L 06/03/22 18:48 1.0 U 1.0 ug/L 06/03/22 18:48 1.0 U 1.0 ug/L 06/03/22 18:48 1.0 U 1.0 ug/L 06/03/22 18:48 1.0 U 1.0 ug/L 06/03/22 18:48 1.0 U 1.0 ug/L 06/03/22 18:48 1.0 U 1.0 ug/L 06/03/22 18:48 1.0 U 1.0 ug/L 06/03/22 18:48 1.0 U 1.0 ug/L 06/03/22 18:48 1.0 U 1.0 ug/L 06/03/22 18:48 1.0 U 1.0 ug/L 06/03/22 18:48 1.0 U 1.0 ug/L 06/03/22 18:48 1.0 U 1.0 ug/L 06/03/22 18:48 1.0 U 1.0 ug/L 06/03/22 18:48 1.0 U 1.0 ug/L 06/03/22 18:48 1.0 U 1.0 ug/L 06/03/22 18:48 1.0 U 1.0 ug/L 06/03/22 18:48 1.0 U 1.0 ug/L 06/03/22 18:48 1.0 U 1.0 ug/L 06/03/22 18:48 1.0 U 1.0 ug/L 06/03/22 18:48 1.0 U 1.0 ug/L 06/03/22 18:48 1.0 U 1.0 ug/L 06/03/22 18:48 1.0 U 1.0 ug/L 06/03/22 18:48 1.0 U 1.0 ug/L 06/03/22 18:48 1.0 U 1.0 ug/L 06/03/22 18:48

Eurofins Canton

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Client Sample ID: DUP-01_052022 Lab Sample ID: 240-167051-20

Date Collected: 05/20/22 00:00 Date Received: 05/21/22 08:00

Matrix: Water

Job ID: 240-167051-1

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	91	78 - 122		06/03/22 18:48	1
Dibromofluoromethane (Surr)	105	73 - 120		06/03/22 18:48	1
4-Bromofluorobenzene (Surr)	94	56 ₋ 136		06/03/22 18:48	1
1,2-Dichloroethane-d4 (Surr)	100	62 - 137		06/03/22 18:48	1

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Client Sample ID: DUP-02_052022

Date Collected: 05/20/22 00:00 Date Received: 05/21/22 08:00

Lab Sample ID: 240-167051-21

Matrix: Water

Job ID: 240-167051-1

Method: 8260D - Volatile Orgar ^{Analyte}		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	1.0		1.0	ug/L		· · · · · · · · · · · · · · · · · · ·	06/03/22 19:12	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	ug/L			06/03/22 19:12	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	ug/L			06/03/22 19:12	
1,1,2-Trichloroethane	1.0	U	1.0	ug/L			06/03/22 19:12	
1,1-Dichloroethane	1.0	U	1.0	ug/L			06/03/22 19:12	
1,1-Dichloroethene	1.0	U	1.0	ug/L			06/03/22 19:12	
1,2,4-Trichlorobenzene	1.0	U	1.0	ug/L			06/03/22 19:12	
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	ug/L			06/03/22 19:12	
Ethylene Dibromide	1.0	U	1.0	ug/L			06/03/22 19:12	
1,2-Dichlorobenzene	1.0	U	1.0	ug/L			06/03/22 19:12	
1,2-Dichloroethane	1.0	U	1.0	ug/L			06/03/22 19:12	
1,2-Dichloropropane	1.0	U	1.0	ug/L			06/03/22 19:12	
1,3-Dichlorobenzene	1.0	U	1.0	ug/L			06/03/22 19:12	
1,4-Dichlorobenzene	1.0	U	1.0	ug/L			06/03/22 19:12	
2-Butanone (MEK)	10	U	10	ug/L			06/03/22 19:12	
2-Hexanone	10	U	10	ug/L			06/03/22 19:12	
4-Methyl-2-pentanone (MIBK)	10	U	10	ug/L			06/03/22 19:12	
Acetone	10	U	10	ug/L			06/03/22 19:12	
Benzene	1.0	U	1.0	ug/L			06/03/22 19:12	
Dichlorobromomethane	1.0	U	1.0	ug/L			06/03/22 19:12	
Bromoform	1.0	U	1.0	ug/L			06/03/22 19:12	
Bromomethane	1.0	U	1.0	ug/L			06/03/22 19:12	
Carbon disulfide	1.0	U	1.0	ug/L			06/03/22 19:12	
Carbon tetrachloride	1.0	U	1.0	ug/L			06/03/22 19:12	
Chlorobenzene	1.0	Ü	1.0	ug/L			06/03/22 19:12	
Chloroethane	1.0	U	1.0	ug/L			06/03/22 19:12	
Chloroform	1.0	U	1.0	ug/L			06/03/22 19:12	
Chloromethane	1.0	U	1.0	ug/L			06/03/22 19:12	
cis-1,2-Dichloroethene	1.0	U	1.0	ug/L			06/03/22 19:12	
cis-1,3-Dichloropropene	1.0	U	1.0	ug/L			06/03/22 19:12	
Cyclohexane	1.0	U	1.0	ug/L			06/03/22 19:12	
Chlorodibromomethane	1.0	U	1.0	ug/L			06/03/22 19:12	
Dichlorodifluoromethane	1.0	U	1.0	ug/L			06/03/22 19:12	
Ethylbenzene	1.0	U	1.0	ug/L			06/03/22 19:12	
sopropylbenzene	1.0	U	1.0	ug/L			06/03/22 19:12	
Methyl acetate	10	U	10	ug/L			06/03/22 19:12	
Methyl tert-butyl ether	1.0	Ü	1.0	ug/L			06/03/22 19:12	
Methylcyclohexane	1.0		1.0	ug/L			06/03/22 19:12	
Methylene Chloride	5.0		5.0	ug/L			06/03/22 19:12	
Styrene	1.0		1.0	ug/L			06/03/22 19:12	
Tetrachloroethene	1.0		1.0	ug/L			06/03/22 19:12	
Toluene	1.0		1.0	ug/L			06/03/22 19:12	
rans-1,2-Dichloroethene	1.0		1.0	ug/L			06/03/22 19:12	
rans-1,3-Dichloropropene	1.0		1.0	ug/L			06/03/22 19:12	
Trichloroethene	1.0		1.0	ug/L			06/03/22 19:12	
Trichlorofluoromethane	1.0		1.0	ug/L			06/03/22 19:12	
Vinyl chloride	1.0		1.0	ug/L			06/03/22 19:12	
Xylenes, Total	2.0		2.0	ug/L			06/03/22 19:12	

Eurofins Canton

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Client Sample ID: DUP-02_052022 Lab Sample ID: 240-167051-21

Date Collected: 05/20/22 00:00 Date Received: 05/21/22 08:00

Matrix: Water

Job ID: 240-167051-1

Surrogate	%Recovery Qualifier	Limits	Prepare	d Analyzed	Dil Fac
Toluene-d8 (Surr)	91	78 - 122		06/03/22 19:12	1
Dibromofluoromethane (Surr)	105	73 - 120		06/03/22 19:12	1
4-Bromofluorobenzene (Surr)	94	56 ₋ 136		06/03/22 19:12	1
1,2-Dichloroethane-d4 (Surr)	101	62 - 137		06/03/22 19:12	1

Client: ZF Active Safety and Electronics LLC Job ID: 240-167051-1

Project/Site: Milford

Client Sample ID: EQUIPMENT BLANK_051922

Date Collected: 05/19/22 10:00 Date Received: 05/21/22 08:00 Lab Sample ID: 240-167051-22

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	1.0	U	1.0	ug/L			06/02/22 19:45	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	ug/L			06/02/22 19:45	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	ug/L			06/02/22 19:45	
1,1,2-Trichloroethane	1.0	U	1.0	ug/L			06/02/22 19:45	
1,1-Dichloroethane	1.0	U	1.0	ug/L			06/02/22 19:45	
1,1-Dichloroethene	1.0	U	1.0	ug/L			06/02/22 19:45	
1,2,4-Trichlorobenzene	1.0	U	1.0	ug/L			06/02/22 19:45	
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	ug/L			06/02/22 19:45	
Ethylene Dibromide	1.0	U	1.0	ug/L			06/02/22 19:45	
1,2-Dichlorobenzene	1.0	U	1.0	ug/L			06/02/22 19:45	
1,2-Dichloroethane	1.0	U	1.0	ug/L			06/02/22 19:45	
1,2-Dichloropropane	1.0	U	1.0	ug/L			06/02/22 19:45	
1,3-Dichlorobenzene	1.0		1.0	ug/L			06/02/22 19:45	
1,4-Dichlorobenzene	1.0		1.0	ug/L			06/02/22 19:45	
2-Butanone (MEK)	10		10	ug/L			06/02/22 19:45	
2-Hexanone	10		10	ug/L			06/02/22 19:45	
4-Methyl-2-pentanone (MIBK)	10		10	ug/L			06/02/22 19:45	
Acetone	10		10	ug/L			06/02/22 19:45	
Benzene	1.0		1.0	ug/L			06/02/22 19:45	
Dichlorobromomethane	1.0		1.0	ug/L			06/02/22 19:45	
Bromoform	1.0		1.0	ug/L			06/02/22 19:45	
Bromomethane	1.0		1.0	ug/L			06/02/22 19:45	
Carbon disulfide	1.0		1.0	ug/L			06/02/22 19:45	
Carbon tetrachloride	1.0		1.0	ug/L			06/02/22 19:45	
Chlorobenzene	1.0		1.0	.			06/02/22 19:45	
Chloroethane	1.0			ug/L				
			1.0	ug/L			06/02/22 19:45	
Chloroform	1.0		1.0	ug/L			06/02/22 19:45	
Chloromethane	1.0		1.0	ug/L			06/02/22 19:45	
cis-1,2-Dichloroethene	1.0		1.0	ug/L			06/02/22 19:45	
cis-1,3-Dichloropropene	1.0		1.0	ug/L			06/02/22 19:45	
Cyclohexane	1.0		1.0	ug/L			06/02/22 19:45	
Chlorodibromomethane	1.0		1.0	ug/L			06/02/22 19:45	
Dichlorodifluoromethane	1.0		1.0	ug/L			06/02/22 19:45	
Ethylbenzene	1.0		1.0	ug/L			06/02/22 19:45	
Isopropylbenzene	1.0		1.0	ug/L			06/02/22 19:45	
Methyl acetate	10		10	ug/L			06/02/22 19:45	
Methyl tert-butyl ether	1.0		1.0	ug/L			06/02/22 19:45	
Methylcyclohexane	1.0		1.0	ug/L			06/02/22 19:45	
Methylene Chloride	5.0	U	5.0	ug/L			06/02/22 19:45	
Styrene	1.0	U	1.0	ug/L			06/02/22 19:45	
Tetrachloroethene	1.0	U	1.0	ug/L			06/02/22 19:45	
Toluene	1.0	U	1.0	ug/L			06/02/22 19:45	
trans-1,2-Dichloroethene	1.0	U	1.0	ug/L			06/02/22 19:45	
trans-1,3-Dichloropropene	1.0	U	1.0	ug/L			06/02/22 19:45	
Trichloroethene	1.0	U	1.0	ug/L			06/02/22 19:45	
Trichlorofluoromethane	1.0	U	1.0	ug/L			06/02/22 19:45	
Vinyl chloride	1.0	U	1.0	ug/L			06/02/22 19:45	
Xylenes, Total	2.0	U	2.0	ug/L			06/02/22 19:45	

Eurofins Canton

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Client: ZF Active Safety and Electronics LLC Job ID: 240-167051-1

Project/Site: Milford

Client Sample ID: EQUIPMENT BLANK_051922 Lab Sample ID: 240-167051-22

Date Collected: 05/19/22 10:00 Matrix: Water

Date Received: 05/21/22 08:00

Surrogate	%Recovery Qualifier	Limits	Prepared Analyzed	Dil Fac
Toluene-d8 (Surr)	94	78 - 122	06/02/22 19:45	1
Dibromofluoromethane (Surr)	114	73 - 120	06/02/22 19:45	1
4-Bromofluorobenzene (Surr)	96	56 ₋ 136	06/02/22 19:45	1
1,2-Dichloroethane-d4 (Surr)	103	62 - 137	06/02/22 19:45	1

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Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Client Sample ID: FIELD BLANK_051922

Date Collected: 05/19/22 09:20 Date Received: 05/21/22 08:00 Lab Sample ID: 240-167051-23

Matrix: Water

Job ID: 240-167051-1

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Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	ug/L			06/02/22 20:10	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	ug/L			06/02/22 20:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	ug/L			06/02/22 20:10	1
1,1,2-Trichloroethane	1.0	U	1.0	ug/L			06/02/22 20:10	1
1,1-Dichloroethane	1.0	U	1.0	ug/L			06/02/22 20:10	1
1,1-Dichloroethene	1.0	U	1.0	ug/L			06/02/22 20:10	•
1,2,4-Trichlorobenzene	1.0	U	1.0	ug/L			06/02/22 20:10	
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	ug/L			06/02/22 20:10	•
Ethylene Dibromide	1.0	U	1.0	ug/L			06/02/22 20:10	
1,2-Dichlorobenzene	1.0	U	1.0	ug/L			06/02/22 20:10	
1,2-Dichloroethane	1.0	U	1.0	ug/L			06/02/22 20:10	
1,2-Dichloropropane	1.0	U	1.0	ug/L			06/02/22 20:10	
1,3-Dichlorobenzene	1.0	U	1.0	ug/L			06/02/22 20:10	
1,4-Dichlorobenzene	1.0	U	1.0	ug/L			06/02/22 20:10	
2-Butanone (MEK)	10	U	10	ug/L			06/02/22 20:10	
2-Hexanone	10	U	10	ug/L			06/02/22 20:10	
4-Methyl-2-pentanone (MIBK)	10	U	10	ug/L			06/02/22 20:10	
Acetone	10	U	10	ug/L			06/02/22 20:10	
Benzene	1.0		1.0	ug/L			06/02/22 20:10	
Dichlorobromomethane	1.0	U	1.0	ug/L			06/02/22 20:10	
Bromoform	1.0	U	1.0	ug/L			06/02/22 20:10	
Bromomethane	1.0		1.0	ug/L			06/02/22 20:10	,
Carbon disulfide	1.0	U	1.0	ug/L			06/02/22 20:10	
Carbon tetrachloride	1.0		1.0	ug/L			06/02/22 20:10	
Chlorobenzene	1.0		1.0	ug/L			06/02/22 20:10	,
Chloroethane	1.0	U	1.0	ug/L			06/02/22 20:10	
Chloroform	1.0	U	1.0	ug/L			06/02/22 20:10	
Chloromethane	1.0		1.0	ug/L			06/02/22 20:10	
cis-1,2-Dichloroethene	1.0		1.0	ug/L			06/02/22 20:10	
cis-1,3-Dichloropropene	1.0		1.0	ug/L			06/02/22 20:10	
Cyclohexane	1.0		1.0	ug/L			06/02/22 20:10	
Chlorodibromomethane	1.0		1.0	ug/L			06/02/22 20:10	
Dichlorodifluoromethane	1.0	U	1.0	ug/L			06/02/22 20:10	
Ethylbenzene	1.0		1.0	ug/L			06/02/22 20:10	
Isopropylbenzene	1.0		1.0	ug/L			06/02/22 20:10	
Methyl acetate	10		10	ug/L			06/02/22 20:10	
Methyl tert-butyl ether	1.0		1.0	ug/L			06/02/22 20:10	
Methylcyclohexane	1.0		1.0	ug/L			06/02/22 20:10	
Methylene Chloride	5.0		5.0	ug/L			06/02/22 20:10	
Styrene	1.0		1.0	ug/L			06/02/22 20:10	,
Tetrachloroethene	1.0		1.0	ug/L			06/02/22 20:10	
Toluene	1.0		1.0	ug/L			06/02/22 20:10	
trans-1,2-Dichloroethene	1.0		1.0	ug/L			06/02/22 20:10	
trans-1,3-Dichloropropene	1.0		1.0	ug/L			06/02/22 20:10	
Trichloroethene	1.0		1.0	ug/L			06/02/22 20:10	
Trichlorofluoromethane	1.0		1.0	ug/L			06/02/22 20:10	
Vinyl chloride	1.0		1.0	ug/L			06/02/22 20:10	
Xylenes, Total	2.0		2.0	ug/L ug/L			06/02/22 20:10	

Eurofins Canton

Client: ZF Active Safety and Electronics LLC Job ID: 240-167051-1

Project/Site: Milford

Date Received: 05/21/22 08:00

Lab Sample ID: 240-167051-23 Client Sample ID: FIELD BLANK_051922

Date Collected: 05/19/22 09:20

Matrix: Water

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	93	78 - 122		06/02/22 20:10	1
Dibromofluoromethane (Surr)	113	73 - 120		06/02/22 20:10	1
4-Bromofluorobenzene (Surr)	97	56 ₋ 136		06/02/22 20:10	1
1,2-Dichloroethane-d4 (Surr)	104	62 - 137		06/02/22 20:10	1

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Client Sample ID: TRIP BLANK_051922

Date Collected: 05/19/22 00:00 Date Received: 05/21/22 08:00 Lab Sample ID: 240-167051-24

Matrix: Water

Job ID: 240-167051-1

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Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	1.0	U	1.0	ug/L		-	06/02/22 20:35	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	ug/L			06/02/22 20:35	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	ug/L			06/02/22 20:35	
1,1,2-Trichloroethane	1.0	U	1.0	ug/L			06/02/22 20:35	
1,1-Dichloroethane	1.0	U	1.0	ug/L			06/02/22 20:35	
1,1-Dichloroethene	1.0	U	1.0	ug/L			06/02/22 20:35	
1,2,4-Trichlorobenzene	1.0	U	1.0	ug/L			06/02/22 20:35	
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	ug/L			06/02/22 20:35	
Ethylene Dibromide	1.0	U	1.0	ug/L			06/02/22 20:35	
1,2-Dichlorobenzene	1.0		1.0	ug/L			06/02/22 20:35	
1,2-Dichloroethane	1.0	U	1.0	ug/L			06/02/22 20:35	
1,2-Dichloropropane	1.0	U	1.0	ug/L			06/02/22 20:35	
1,3-Dichlorobenzene	1.0		1.0	ug/L			06/02/22 20:35	
1,4-Dichlorobenzene	1.0		1.0	ug/L			06/02/22 20:35	
2-Butanone (MEK)	10	_	10	ug/L			06/02/22 20:35	
2-Hexanone	10		10	ug/L			06/02/22 20:35	
4-Methyl-2-pentanone (MIBK)	10		10	ug/L			06/02/22 20:35	
Acetone	10		10	ug/L			06/02/22 20:35	
Benzene	1.0		1.0	ug/L			06/02/22 20:35	
Dichlorobromomethane	1.0		1.0	ug/L			06/02/22 20:35	
Bromoform	1.0		1.0	ug/L			06/02/22 20:35	
Bromomethane	1.0		1.0	ug/L			06/02/22 20:35	
Carbon disulfide	1.0		1.0	ug/L			06/02/22 20:35	
Carbon tetrachloride	1.0		1.0	ug/L ug/L			06/02/22 20:35	
Chlorobenzene	1.0		1.0				06/02/22 20:35	
Chloroethane	1.0			ug/L			06/02/22 20:35	
Chloroform	1.0		1.0	ug/L				
			1.0	ug/L			06/02/22 20:35	
Chloromethane	1.0		1.0	ug/L			06/02/22 20:35	
cis-1,2-Dichloroethene	1.0		1.0	ug/L			06/02/22 20:35	
cis-1,3-Dichloropropene	1.0		1.0	ug/L			06/02/22 20:35	
Cyclohexane	1.0		1.0	ug/L			06/02/22 20:35	
Chlorodibromomethane	1.0		1.0	ug/L			06/02/22 20:35	
Dichlorodifluoromethane	1.0		1.0	ug/L			06/02/22 20:35	
Ethylbenzene 	1.0		1.0	ug/L			06/02/22 20:35	
sopropylbenzene	1.0		1.0	ug/L			06/02/22 20:35	
Methyl acetate	10		10	ug/L			06/02/22 20:35	
Methyl tert-butyl ether	1.0		1.0	ug/L			06/02/22 20:35	
Methylcyclohexane	1.0		1.0	ug/L			06/02/22 20:35	
Methylene Chloride	5.0	U	5.0	ug/L			06/02/22 20:35	
Styrene	1.0	U	1.0	ug/L			06/02/22 20:35	
Tetrachloroethene	1.0		1.0	ug/L			06/02/22 20:35	
Toluene	1.0	U	1.0	ug/L			06/02/22 20:35	
rans-1,2-Dichloroethene	1.0	U	1.0	ug/L			06/02/22 20:35	
rans-1,3-Dichloropropene	1.0	U	1.0	ug/L			06/02/22 20:35	
Frichloroethene Trichloroethene	1.0	U	1.0	ug/L			06/02/22 20:35	
Trichlorofluoromethane	1.0	U	1.0	ug/L			06/02/22 20:35	
√inyl chloride	1.0	U	1.0	ug/L			06/02/22 20:35	
Xylenes, Total	2.0	U	2.0	ug/L			06/02/22 20:35	

Client: ZF Active Safety and Electronics LLC Job ID: 240-167051-1

Project/Site: Milford

Client Sample ID: TRIP BLANK_051922 Lab Sample ID: 240-167051-24

Date Collected: 05/19/22 00:00 Lab Sample 1D: 240-107031-24

Date Collected: 05/19/22 00:00 Matrix: Wate Date Received: 05/21/22 08:00

Surrogate	%Recovery Qu	ualifier Limits	Prepared Analyzed	Dil Fac
Toluene-d8 (Surr)	96	78 - 122	06/02/22 20:38	1
Dibromofluoromethane (Surr)	112	73 - 120	06/02/22 20:3	1
4-Bromofluorobenzene (Surr)	99	56 - 136	06/02/22 20:3	1
1,2-Dichloroethane-d4 (Surr)	102	62 - 137	06/02/22 20:38	1

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Surrogate Summary

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water Prep Type: Total/NA

			Pe	ercent Surro	ogate Recovery (Acce	eptance Limits)
		TOL	DBFM	BFB	DCA	
Lab Sample ID	Client Sample ID	(78-122)	(73-120)	(56-136)	(62-137)	
240-167051-1	OW-16D2_051822	102	97	98	109	
240-167051-2	OW-10D_051722	86	96	89	93	
240-167051-2 MS	OW-10D_051722	86	95	90	91	
240-167051-2 MSD	OW-10D_051722	88	94	92	91	
240-167051-3	OW-08D_051722	84	93	87	93	
240-167051-4	OW-05D2_051722	87	97	90	94	
240-167051-5	OW-30_051722	85	96	90	93	
240-167051-6	OW-23D_051722	84	95	88	94	
240-167051-7	OW-28_051722	86	95	88	94	
240-167051-8	OW-18D_051822	86	96	89	93	
240-167051-9	OW-09-ML-D_051822	84	91	85	89	
240-167051-10	OW-09-ML-C_051822	87	96	89	95	
240-167051-11	OW-18-ML-A_051822	87	99	89	95	
240-167051-12	OW-18-ML-B_051822	83	95	86	91	
240-167051-13	OW-18-ML-C_051922	87	97	89	96	
240-167051-14	OW-18-ML-D 051922	103	98	97	106	
240-167051-15	OW-18-ML-E 051922	110	110	98	100	
240-167051-16	OW-18-ML-F_051922	107	108	97	101	
240-167051-17	OW-02D2 051922	108	108	98	99	
240-167051-18	OW-22_052022	90	102	93	98	
240-167051-19	OW-07D_052022	90	105	93	102	
240-167051-20	DUP-01 052022	91	105	94	100	
240-167051-21	DUP-02 052022	91	105	94	101	
240-167051-22	EQUIPMENT BLANK_051922	94	114	96	103	
240-167051-23	FIELD BLANK 051922	93	113	97	104	
240-167051-24	TRIP BLANK_051922	96	112	99	102	
LCS 240-528483/5	Lab Control Sample	90	98	93	93	
LCS 240-528486/5	Lab Control Sample	107	94	110	97	
LCS 240-528862/5	Lab Control Sample	99	94	105	88	
LCS 240-528938/5	Lab Control Sample	110	102	103	94	
LCS 240-529073/5	Lab Control Sample	93	102	96	96	
MB 240-528483/8	Method Blank	88	98	88	92	
MB 240-528486/8	Method Blank	102	93	99	101	
MB 240-528862/8	Method Blank	97	114	99	104	
MB 240-528938/7	Method Blank	104	105	95	96	
MB 240-529073/8	Method Blank	89	102	92	98	

Surrogate Legend

TOL = Toluene-d8 (Surr)

DBFM = Dibromofluoromethane (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DCA = 1,2-Dichloroethane-d4 (Surr)

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Job ID: 240-167051-1

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Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Job ID: 240-167051-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 240-528483/8

Matrix: Water

Analysis Batch: 528483

Client Sample ID: Method Blank
Prep Type: Total/NA

Amelija		MB Qualifier	DI.	l lmi4	_	Dramarad	Amalumad	Dil Faa
Analyte	1.0		RL	Unit	<u>D</u> .	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane			1.0	ug/L			05/31/22 11:47	1
1,1,2,2-Tetrachloroethane	1.0		1.0	ug/L			05/31/22 11:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0		1.0	ug/L			05/31/22 11:47	
1,1,2-Trichloroethane	1.0		1.0	ug/L			05/31/22 11:47	1
1,1-Dichloroethane	1.0		1.0	ug/L			05/31/22 11:47	1
1,1-Dichloroethene	1.0		1.0	ug/L			05/31/22 11:47	
1,2,4-Trichlorobenzene	1.0		1.0	ug/L			05/31/22 11:47	1
1,2-Dibromo-3-Chloropropane	2.0		2.0	ug/L			05/31/22 11:47	1
Ethylene Dibromide	1.0	. 	1.0	ug/L			05/31/22 11:47	1
1,2-Dichlorobenzene	1.0		1.0	ug/L			05/31/22 11:47	1
1,2-Dichloroethane	1.0		1.0	ug/L			05/31/22 11:47	1
1,2-Dichloropropane	1.0		1.0	ug/L			05/31/22 11:47	1
1,3-Dichlorobenzene	1.0		1.0	ug/L			05/31/22 11:47	1
1,4-Dichlorobenzene	1.0		1.0	ug/L			05/31/22 11:47	1
2-Butanone (MEK)	10	U	10	ug/L			05/31/22 11:47	1
2-Hexanone	10	U	10	ug/L			05/31/22 11:47	1
4-Methyl-2-pentanone (MIBK)	10	U	10	ug/L			05/31/22 11:47	1
Acetone	10	U	10	ug/L			05/31/22 11:47	1
Benzene	1.0	U	1.0	ug/L			05/31/22 11:47	1
Dichlorobromomethane	1.0	U	1.0	ug/L			05/31/22 11:47	1
Bromoform	1.0	U	1.0	ug/L			05/31/22 11:47	1
Bromomethane	1.0	U	1.0	ug/L			05/31/22 11:47	1
Carbon disulfide	1.0	U	1.0	ug/L			05/31/22 11:47	1
Carbon tetrachloride	1.0	U	1.0	ug/L			05/31/22 11:47	1
Chlorobenzene	1.0	U	1.0	ug/L			05/31/22 11:47	1
Chloroethane	1.0	U	1.0	ug/L			05/31/22 11:47	1
Chloroform	1.0	U	1.0	ug/L			05/31/22 11:47	1
Chloromethane	1.0	U	1.0	ug/L			05/31/22 11:47	1
cis-1,2-Dichloroethene	1.0	U	1.0	ug/L			05/31/22 11:47	1
cis-1,3-Dichloropropene	1.0	U	1.0	ug/L			05/31/22 11:47	1
Cyclohexane	1.0	U	1.0	ug/L			05/31/22 11:47	1
Chlorodibromomethane	1.0	U	1.0	ug/L			05/31/22 11:47	1
Dichlorodifluoromethane	1.0	U	1.0	ug/L			05/31/22 11:47	1
Ethylbenzene	1.0		1.0	ug/L			05/31/22 11:47	1
Isopropylbenzene	1.0	U	1.0	ug/L			05/31/22 11:47	1
Methyl acetate	10	U	10	ug/L			05/31/22 11:47	1
Methyl tert-butyl ether	1.0		1.0	ug/L			05/31/22 11:47	1
Methylcyclohexane	1.0		1.0	ug/L			05/31/22 11:47	1
Methylene Chloride	5.0		5.0	ug/L			05/31/22 11:47	1
Styrene	1.0		1.0	ug/L			05/31/22 11:47	1
Tetrachloroethene	1.0		1.0	ug/L			05/31/22 11:47	1
Toluene	1.0		1.0	ug/L			05/31/22 11:47	1
trans-1,2-Dichloroethene	1.0		1.0	ug/L			05/31/22 11:47	1
trans-1,3-Dichloropropene	1.0		1.0	ug/L			05/31/22 11:47	1
Trichloroethene	1.0		1.0	ug/L			05/31/22 11:47	1
Trichlorofluoromethane	1.0		1.0	ug/L			05/31/22 11:47	
Vinyl chloride	1.0		1.0	ug/L ug/L			05/31/22 11:47	1
Xylenes, Total	2.0		2.0	ug/L			05/31/22 11:47	1

Eurofins Canton

6/7/2022

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Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Job ID: 240-167051-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 240-528483/8

Matrix: Water

Analysis Batch: 528483

Client Sample ID: Method Blank

Prep Type: Total/NA

MB MB %Recovery Qualifier Dil Fac Surrogate Limits Prepared Analyzed Toluene-d8 (Surr) 88 78 - 122 05/31/22 11:47 Dibromofluoromethane (Surr) 98 73 - 120 05/31/22 11:47 4-Bromofluorobenzene (Surr) 88 56 - 136 05/31/22 11:47 1,2-Dichloroethane-d4 (Surr) 92 62 - 137 05/31/22 11:47

Lab Sample ID: LCS 240-528483/5

Matrix: Water

Analysis Batch: 528483

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

•	Spike	LCS	LCS		%Rec	
Analyte	Added	Result	Qualifier Unit	D %Rec	Limits	
1,1,1-Trichloroethane	20.0	18.7	ug/L	94	64 - 131	
1,1,2,2-Tetrachloroethane	20.0	18.0	ug/L	90	58 - 157	
1,1,2-Trichloro-1,2,2-trifluoroetha	20.0	20.1	ug/L	101	51 - 146	
ne						
1,1,2-Trichloroethane	20.0	17.4	ug/L	87	70 - 138	
1,1-Dichloroethane	20.0	18.5	ug/L	92	72 - 127	
1,1-Dichloroethene	20.0	19.6	ug/L	98	63 - 134	
1,2,4-Trichlorobenzene	20.0	14.1	ug/L	70	44 - 147	
1,2-Dibromo-3-Chloropropane	20.0	14.9	ug/L	75	53 - 135	
Ethylene Dibromide	20.0	17.1	ug/L	85	71 - 134	
1,2-Dichlorobenzene	20.0	16.6	ug/L	83	78 - 120	
1,2-Dichloroethane	20.0	19.3	ug/L	97	66 - 128	
1,2-Dichloropropane	20.0	18.8	ug/L	94	75 - 133	
1,3-Dichlorobenzene	20.0	16.4	ug/L	82	80 - 120	
1,4-Dichlorobenzene	20.0	16.5	ug/L	82	80 - 120	
2-Butanone (MEK)	40.0	35.2	ug/L	88	54 - 156	
2-Hexanone	40.0	33.0	ug/L	83	43 - 167	
4-Methyl-2-pentanone (MIBK)	40.0	35.2	ug/L	88	46 - 158	
Acetone	40.0	36.2	ug/L	90	50 - 149	
Benzene	20.0	19.1	ug/L	95	77 - 123	
Dichlorobromomethane	20.0	18.4	ug/L	92	69 - 126	
Bromoform	20.0	14.0	ug/L	70	57 ₋ 129	
Bromomethane	20.0	18.8	ug/L	94	36 - 142	
Carbon disulfide	20.0	19.3	ug/L	97	43 - 140	
Carbon tetrachloride	20.0	18.1	ug/L	91	55 ₋ 137	
Chlorobenzene	20.0	17.1	ug/L	85	80 - 121	
Chloroethane	20.0	20.4	ug/L	102	38 - 152	
Chloroform	20.0	19.1	ug/L	95	74 - 122	
Chloromethane	20.0	19.2	ug/L	96	47 - 143	
cis-1,2-Dichloroethene	20.0	19.2	-	96	77 - 123	
cis-1,3-Dichloropropene	20.0	18.0	ug/L	90	64 - 130	
Cyclohexane	20.0	17.2	ug/L	86	58 - 146	
Chlorodibromomethane	20.0	15.5	ug/L	77	70 - 124	
Dichlorodifluoromethane	20.0	24.1	ug/L	121	34 - 153	
Ethylbenzene	20.0	16.8	ug/L	84	80 - 121	
Isopropylbenzene	20.0	15.2	ug/L	76	74 - 128	
Methyl acetate	40.0	34.7	ug/L	87	42 - 169	
Methyl tert-butyl ether	20.0	18.4	ug/L	92	65 - 126	
	20.0	15.4	ug/L	92 77	62 - 136	
Methylcyclohexane	20.0	15.4	ug/L	11	02 - 130	

Eurofins Canton

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6/7/2022

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Job ID: 240-167051-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 240-528483/5

Matrix: Water

Analysis Batch: 528483

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

	Spike	LUS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Methylene Chloride	20.0	18.5		ug/L		93	71 - 125	
Styrene	20.0	16.5		ug/L		82	80 - 135	
Tetrachloroethene	20.0	17.3		ug/L		86	76 - 123	
Toluene	20.0	16.8		ug/L		84	80 - 123	
trans-1,2-Dichloroethene	20.0	18.3		ug/L		92	75 - 124	
trans-1,3-Dichloropropene	20.0	16.5		ug/L		82	57 - 129	
Trichloroethene	20.0	19.2		ug/L		96	70 - 122	
Trichlorofluoromethane	20.0	21.0		ug/L		105	30 - 170	
Vinyl chloride	20.0	20.5		ug/L		102	60 - 144	
Xylenes, Total	40.0	32.9		ug/L		82	80 - 121	
m-Xylene & p-Xylene	20.0	16.4		ug/L		82	80 - 120	
o-Xylene	20.0	16.5		ug/L		83	80 - 123	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
Toluene-d8 (Surr)	90		78 - 122
Dibromofluoromethane (Surr)	98		73 - 120
4-Bromofluorobenzene (Surr)	93		56 - 136
1,2-Dichloroethane-d4 (Surr)	93		62 - 137

Lab Sample ID: 240-167051-2 MS Client Sample ID: OW-10D_051722 Prep Type: Total/NA **Matrix: Water**

Analysis Batch: 528483

Analysis Batch: 528483	Camula	Commis	Cmilea	MS	MS				%Rec
Analyte	•	Sample Qualifier	Spike Added	_	Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	1.0		20.0	17.9	Qualifier	ug/L	_ =	89	60 - 130
1,1,2,2-Tetrachloroethane	1.0		20.0	17.9		ug/L ug/L		86	54 ₋ 145
			20.0			•			
1,1,2-Trichloro-1,2,2-trifluoroetha ne	1.0	U	20.0	19.0		ug/L		95	41 - 147
1,1,2-Trichloroethane	1.0	U	20.0	16.5		ug/L		82	69 - 131
1,1-Dichloroethane	1.0		20.0	17.7		ug/L		88	68 - 125
1,1-Dichloroethene	1.0		20.0	18.5		ug/L		92	56 - 135
1,2,4-Trichlorobenzene	1.0	U	20.0	13.1		ug/L		65	29 - 156
1,2-Dibromo-3-Chloropropane	2.0	U	20.0	13.7		ug/L		69	41 - 129
Ethylene Dibromide	1.0	U	20.0	16.0		ug/L		80	69 - 125
1,2-Dichlorobenzene	1.0	U	20.0	15.7		ug/L		78	73 - 120
1,2-Dichloroethane	1.0	U	20.0	18.3		ug/L		92	63 - 126
1,2-Dichloropropane	1.0	U	20.0	17.6		ug/L		88	69 - 130
1,3-Dichlorobenzene	1.0	U	20.0	15.2		ug/L		76	73 - 120
1,4-Dichlorobenzene	1.0	U	20.0	15.5		ug/L		77	74 - 120
2-Butanone (MEK)	10	U	40.0	34.6		ug/L		86	40 - 151
2-Hexanone	10	U	40.0	31.5		ug/L		79	35 - 156
4-Methyl-2-pentanone (MIBK)	10	U	40.0	34.0		ug/L		85	31 - 153
Acetone	10	U	40.0	33.8		ug/L		85	33 - 149
Benzene	1.0	U	20.0	18.0		ug/L		90	64 - 128
Dichlorobromomethane	1.0	U	20.0	17.3		ug/L		87	62 - 125
Bromoform	1.0	U	20.0	12.5		ug/L		63	47 - 125
Bromomethane	1.0	U	20.0	15.2		ug/L		76	28 - 150
Carbon disulfide	1.0	U	20.0	17.8		ug/L		89	38 - 140
Carbon tetrachloride	1.0	U	20.0	16.9		ug/L		84	51 - 133

Eurofins Canton

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Client: ZF Active Safety and Electronics LLC Job ID: 240-167051-1

Project/Site: Milford

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 240-167051-2 MS

Matrix: Water

Analysis Batch: 528483

Client Sample ID: OW-10D_051722

Prep Type: Total/NA

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chlorobenzene	1.0	U	20.0	16.2		ug/L		81	74 - 121	
Chloroethane	1.0	U	20.0	19.6		ug/L		98	10 - 199	
Chloroform	1.0	U	20.0	17.7		ug/L		89	70 - 122	
Chloromethane	1.0	U	20.0	17.6		ug/L		88	32 - 149	
cis-1,2-Dichloroethene	1.0	U	20.0	17.8		ug/L		89	66 - 128	
cis-1,3-Dichloropropene	1.0	U	20.0	16.5		ug/L		83	47 - 125	
Cyclohexane	1.0	U	20.0	16.2		ug/L		81	42 - 147	
Chlorodibromomethane	1.0	U	20.0	14.1		ug/L		71	65 - 120	
Dichlorodifluoromethane	1.0	U	20.0	22.5		ug/L		113	38 - 139	
Ethylbenzene	1.0	U	20.0	15.9		ug/L		79	67 - 127	
Isopropylbenzene	1.0	U	20.0	14.3		ug/L		72	64 - 129	
Methyl acetate	10	U	40.0	33.2		ug/L		83	37 - 155	
Methyl tert-butyl ether	1.0	U	20.0	17.7		ug/L		88	47 - 134	
Methylcyclohexane	1.0	U	20.0	14.2		ug/L		71	39 - 144	
Methylene Chloride	5.0	U	20.0	17.4		ug/L		87	62 - 129	
Styrene	1.0	U	20.0	15.5		ug/L		78	70 - 139	
Tetrachloroethene	1.0	U	20.0	15.5		ug/L		78	62 - 131	
Toluene	1.0	U	20.0	15.9		ug/L		79	58 - 135	
trans-1,2-Dichloroethene	1.0	U	20.0	17.3		ug/L		86	56 - 136	
trans-1,3-Dichloropropene	1.0	U	20.0	15.6		ug/L		78	47 - 120	
Trichloroethene	1.0	U	20.0	17.6		ug/L		88	61 - 124	
Trichlorofluoromethane	1.0	U	20.0	19.9		ug/L		99	24 - 177	
Vinyl chloride	1.0	U	20.0	18.9		ug/L		94	43 - 157	
Xylenes, Total	2.0	U	40.0	30.7		ug/L		77	71 - 123	
m-Xylene & p-Xylene	2.0	U	20.0	15.3		ug/L		76	71 - 123	
o-Xylene	1.0	U	20.0	15.4		ug/L		77	70 - 125	

MS MS

Surrogate	%Recovery	Qualifier	Limits
Toluene-d8 (Surr)	86		78 - 122
Dibromofluoromethane (Surr)	95		73 - 120
4-Bromofluorobenzene (Surr)	90		56 - 136
1,2-Dichloroethane-d4 (Surr)	91		62 - 137

Lab Sample ID: 240-167051-2 MSD

Matrix: Water

Analysis Batch: 528483

Client Sample ID: OW-10D_051722 **Prep Type: Total/NA**

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,1,1-Trichloroethane	1.0	U	20.0	18.5		ug/L		92	60 - 130	3	17
1,1,2,2-Tetrachloroethane	1.0	U	20.0	18.7		ug/L		94	54 - 145	8	15
1,1,2-Trichloro-1,2,2-trifluoroetha	1.0	U	20.0	19.5		ug/L		97	41 - 147	2	35
ne											
1,1,2-Trichloroethane	1.0	U	20.0	17.6		ug/L		88	69 - 131	6	14
1,1-Dichloroethane	1.0	U	20.0	18.2		ug/L		91	68 - 125	3	13
1,1-Dichloroethene	1.0	U	20.0	19.0		ug/L		95	56 - 135	3	26
1,2,4-Trichlorobenzene	1.0	U	20.0	14.2		ug/L		71	29 - 156	8	19
1,2-Dibromo-3-Chloropropane	2.0	U	20.0	14.7		ug/L		73	41 - 129	7	22
Ethylene Dibromide	1.0	U	20.0	17.0		ug/L		85	69 - 125	6	14
1,2-Dichlorobenzene	1.0	U	20.0	17.0		ug/L		85	73 - 120	8	14

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Spike

MSD MSD

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Job ID: 240-167051-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Sample Sample

10 U

1.0 U

1.0 U

2.0 U

2.0 U

1.0 U

Lab Sample ID: 240-167051-2 MSD

Matrix: Water

Methyl acetate

Xylenes, Total

o-Xylene

m-Xylene & p-Xylene

1,2-Dichloroethane-d4 (Surr)

Methyl tert-butyl ether

Methylcyclohexane

Analysis Batch: 528483

Client Sample ID: OW-10D_051722

%Rec

Prep Type: Total/NA

Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	ŀ
1,2-Dichloroethane	1.0	U	20.0	19.1		ug/L		95	63 - 126	4	12	
1,2-Dichloropropane	1.0	U	20.0	18.3		ug/L		92	69 - 130	4	13	
1,3-Dichlorobenzene	1.0	U	20.0	16.5		ug/L		83	73 - 120	8	14	
1,4-Dichlorobenzene	1.0	U	20.0	16.6		ug/L		83	74 - 120	7	15	
2-Butanone (MEK)	10	U	40.0	35.6		ug/L		89	40 - 151	3	20	
2-Hexanone	10	U	40.0	33.2		ug/L		83	35 - 156	5	17	
4-Methyl-2-pentanone (MIBK)	10	U	40.0	35.5		ug/L		89	31 - 153	4	15	
Acetone	10	U	40.0	35.2		ug/L		88	33 - 149	4	34	
Benzene	1.0	U	20.0	18.6		ug/L		93	64 - 128	4	14	Ī
Dichlorobromomethane	1.0	U	20.0	17.7		ug/L		88	62 - 125	2	13	
Bromoform	1.0	U	20.0	13.6		ug/L		68	47 - 125	8	15	i
Bromomethane	1.0	U	20.0	17.3		ug/L		86	28 - 150	13	26	
Carbon disulfide	1.0	U	20.0	18.6		ug/L		93	38 - 140	5	23	
Carbon tetrachloride	1.0	U	20.0	17.6		ug/L		88	51 - 133	4	24	
Chlorobenzene	1.0	U	20.0	16.8		ug/L		84	74 - 121	4	14	ı
Chloroethane	1.0	U	20.0	19.8		ug/L		99	10 - 199	1	30	
Chloroform	1.0	U	20.0	18.5		ug/L		93	70 - 122	4	14	ı
Chloromethane	1.0	U	20.0	19.0		ug/L		95	32 - 149	8	27	
cis-1,2-Dichloroethene	1.0	U	20.0	18.7		ug/L		93	66 - 128	5	14	
cis-1,3-Dichloropropene	1.0	U	20.0	17.4		ug/L		87	47 - 125	5	13	
Cyclohexane	1.0	U	20.0	16.7		ug/L		84	42 - 147	3	35	
Chlorodibromomethane	1.0	U	20.0	15.2		ug/L		76	65 - 120	7	13	
Dichlorodifluoromethane	1.0	U	20.0	23.1		ug/L		116	38 - 139	3	35	
Ethylbenzene	1.0	U	20.0	16.6		ug/L		83	67 - 127	4	15	
Isopropylbenzene	1.0	U	20.0	14.8		ug/L		74	64 - 129	3	18	

Methylene Chloride	5.0 L	U 20.0	17.8	ug/L	89	62 - 129	2
Styrene	1.0 L	U 20.0	16.2	ug/L	81	70 - 139	4
Tetrachloroethene	1.0 L	U 20.0	16.5	ug/L	83	62 - 131	6
Toluene	1.0 L	U 20.0	16.6	ug/L	83	58 - 135	4
trans-1,2-Dichloroethene	1.0 L	U 20.0	18.0	ug/L	90	56 - 136	4
trans-1,3-Dichloropropene	1.0 L	U 20.0	16.6	ug/L	83	47 - 120	6
Trichloroethene	1.0 L	U 20.0	18.6	ug/L	93	61 - 124	6
Trichlorofluoromethane	1.0 L	U 20.0	20.7	ug/L	104	24 - 177	4
Vinyl chloride	1.0 L	U 20.0	19.9	ug/L	100	43 - 157	5

40.0

20.0

20.0

62 - 137

40.0

20.0

20.0

34.2

18.4

14.8

32.2

16.0

16.2

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

86

92

74

81

80

81

37 - 155

47 - 134

39 - 144

71 - 123

71 - 123

70 - 125

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
Toluene-d8 (Surr)	88		78 - 122
Dibromofluoromethane (Surr)	94		73 - 120
4-Bromofluorobenzene (Surr)	92		56 ₋ 136

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4

6

RPD

8

10

12

13

| 4

18

16

24

15

16

15

5

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Job ID: 240-167051-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 240-528486/8

Matrix: Water

Analysis Batch: 528486

Client Sample ID: Method Blank

					Pr	ep Type: To		
MB N	IB							5
ult C	hialifior	RI	Unit	D	Propared	Analyzed	Dil Fac	

Analyta		MB Qualifier	RL	Unit	D	Droporod	Analyzad	Dil Fac
Analyte 1,1,1-Trichloroethane	1.0		1.0	Unit	b	Prepared	Analyzed 05/31/22 11:40	
1,1,2,2-Tetrachloroethane	1.0		1.0	ug/L			05/31/22 11:40	1
1,1,2,2-Tetrachioroethane 1,1,2-Trichloro-1,2,2-trifluoroethane	1.0		1.0	ug/L ug/L			05/31/22 11:40	1 1
	1.0						05/31/22 11:40	
1,1,2-Trichloroethane	1.0		1.0	ug/L				1
1,1-Dichloroethane			1.0	ug/L			05/31/22 11:40	1
1,1-Dichloroethene	1.0		1.0	ug/L			05/31/22 11:40	
1,2,4-Trichlorobenzene	1.0		1.0	ug/L			05/31/22 11:40	1
1,2-Dibromo-3-Chloropropane	2.0		2.0	ug/L			05/31/22 11:40	1
Ethylene Dibromide	1.0		1.0	ug/L			05/31/22 11:40	
1,2-Dichlorobenzene	1.0		1.0	ug/L			05/31/22 11:40	1
1,2-Dichloroethane	1.0		1.0	ug/L			05/31/22 11:40	1
1,2-Dichloropropane	1.0		1.0	ug/L			05/31/22 11:40	
1,3-Dichlorobenzene	1.0		1.0	ug/L			05/31/22 11:40	1
1,4-Dichlorobenzene	1.0		1.0	ug/L			05/31/22 11:40	1
2-Butanone (MEK)	10		10	ug/L			05/31/22 11:40	1
2-Hexanone	10		10	ug/L			05/31/22 11:40	1
4-Methyl-2-pentanone (MIBK)	10		10	ug/L			05/31/22 11:40	1
Acetone	10		10	ug/L			05/31/22 11:40	1
Benzene	1.0		1.0	ug/L			05/31/22 11:40	1
Dichlorobromomethane	1.0		1.0	ug/L			05/31/22 11:40	1
Bromoform	1.0	U	1.0	ug/L			05/31/22 11:40	1
Bromomethane	1.0	U	1.0	ug/L			05/31/22 11:40	1
Carbon disulfide	1.0	U	1.0	ug/L			05/31/22 11:40	1
Carbon tetrachloride	1.0	U	1.0	ug/L			05/31/22 11:40	1
Chlorobenzene	1.0	U	1.0	ug/L			05/31/22 11:40	1
Chloroethane	1.0	U	1.0	ug/L			05/31/22 11:40	1
Chloroform	1.0	U	1.0	ug/L			05/31/22 11:40	1
Chloromethane	1.0	U	1.0	ug/L			05/31/22 11:40	1
cis-1,2-Dichloroethene	1.0	U	1.0	ug/L			05/31/22 11:40	1
cis-1,3-Dichloropropene	1.0	U	1.0	ug/L			05/31/22 11:40	1
Cyclohexane	1.0	U	1.0	ug/L			05/31/22 11:40	1
Chlorodibromomethane	1.0	U	1.0	ug/L			05/31/22 11:40	1
Dichlorodifluoromethane	1.0	U	1.0	ug/L			05/31/22 11:40	1
Ethylbenzene	1.0	U	1.0	ug/L			05/31/22 11:40	1
Isopropylbenzene	1.0	U	1.0	ug/L			05/31/22 11:40	1
Methyl acetate	10	U	10	ug/L			05/31/22 11:40	1
Methyl tert-butyl ether	1.0	U	1.0	ug/L			05/31/22 11:40	1
Methylcyclohexane	1.0	U	1.0	ug/L			05/31/22 11:40	1
Methylene Chloride	5.0	U	5.0	ug/L			05/31/22 11:40	1
Styrene	1.0	U	1.0	ug/L			05/31/22 11:40	1
Tetrachloroethene	1.0	U	1.0	ug/L			05/31/22 11:40	1
Toluene	1.0	U	1.0	ug/L			05/31/22 11:40	1
trans-1,2-Dichloroethene	1.0	U	1.0	ug/L			05/31/22 11:40	1
trans-1,3-Dichloropropene	1.0		1.0	ug/L			05/31/22 11:40	1
Trichloroethene	1.0		1.0	ug/L			05/31/22 11:40	1
Trichlorofluoromethane	1.0		1.0	ug/L			05/31/22 11:40	1
Vinyl chloride	1.0		1.0	ug/L			05/31/22 11:40	1
Xylenes, Total	2.0		2.0	ug/L			05/31/22 11:40	1

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Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Job ID: 240-167051-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 240-528486/8

Matrix: Water

Analysis Batch: 528486

Client Sample ID: Method Blank

Prep Type: Total/NA

	MB	MB				
Surrogate	%Recovery	Qualifier	Limits	Prepa	ared Analyzed	Dil Fac
Toluene-d8 (Surr)	102		78 - 122		05/31/22 11:40	1
Dibromofluoromethane (Surr)	93		73 - 120		05/31/22 11:40	1
4-Bromofluorobenzene (Surr)	99		56 ₋ 136		05/31/22 11:40	1
1 2-Dichloroethane-d4 (Surr)	101		62 - 137		05/31/22 11:40	1

Lab Sample ID: LCS 240-528486/5

Matrix: Water

Analysis Batch: 528486

Client Sample	ID:	Lab	Control	Sample
		Dro	Tunoi "	Total/NIA

Prep Type: Total/NA

	Spike	LCS LCS			%Rec	
Analyte	Added	Result Qualifier	Unit	D %Rec	Limits	
1,1,1-Trichloroethane	20.0	20.9	ug/L	105	64 - 131	
1,1,2,2-Tetrachloroethane	20.0	21.6	ug/L	108	58 - 157	
1,1,2-Trichloro-1,2,2-trifluoroetha	20.0	20.3	ug/L	102	51 - 146	
ne						
1,1,2-Trichloroethane	20.0	21.7	ug/L	109	70 - 138	
1,1-Dichloroethane	20.0	20.0	ug/L	100	72 - 127	
1,1-Dichloroethene	20.0	20.9	ug/L	105	63 - 134	
1,2,4-Trichlorobenzene	20.0	20.9	ug/L	105	44 - 147	
1,2-Dibromo-3-Chloropropane	20.0	21.8	ug/L	109	53 - 135	
Ethylene Dibromide	20.0	21.6	ug/L	108	71 - 134	
1,2-Dichlorobenzene	20.0	21.2	ug/L	106	78 - 120	
1,2-Dichloroethane	20.0	19.2	ug/L	96	66 - 128	
1,2-Dichloropropane	20.0	19.9	ug/L	100	75 - 133	
1,3-Dichlorobenzene	20.0	20.9	ug/L	104	80 - 120	
1,4-Dichlorobenzene	20.0	20.6	ug/L	103	80 - 120	
2-Butanone (MEK)	40.0	39.7	ug/L	99	54 - 156	
2-Hexanone	40.0	47.5	ug/L	119	43 - 167	
4-Methyl-2-pentanone (MIBK)	40.0	42.0	ug/L	105	46 - 158	
Acetone	40.0	39.7	ug/L	99	50 - 149	
Benzene	20.0	20.0	ug/L	100	77 - 123	
Dichlorobromomethane	20.0	20.3	ug/L	102	69 - 126	
Bromoform	20.0	22.7	ug/L	113	57 - 129	
Bromomethane	20.0	15.6	ug/L	78	36 - 142	
Carbon disulfide	20.0	21.2	ug/L	106	43 - 140	
Carbon tetrachloride	20.0	21.3	ug/L	107	55 - 137	
Chlorobenzene	20.0	20.7	ug/L	104	80 - 121	
Chloroethane	20.0	16.1	ug/L	81	38 - 152	
Chloroform	20.0	19.7	ug/L	98	74 - 122	
Chloromethane	20.0	19.0	ug/L	95	47 - 143	
cis-1,2-Dichloroethene	20.0	19.8	ug/L	99	77 - 123	
cis-1,3-Dichloropropene	20.0	21.5	ug/L	107	64 - 130	
Cyclohexane	20.0	20.5	ug/L	103	58 - 146	
Chlorodibromomethane	20.0	22.4	ug/L	112	70 - 124	
Dichlorodifluoromethane	20.0	25.4	ug/L	127	34 - 153	
Ethylbenzene	20.0	21.7	ug/L	109	80 - 121	
Isopropylbenzene	20.0	22.5	ug/L	113	74 - 128	
Methyl acetate	40.0	40.2	ug/L	100	42 - 169	
Methyl tert-butyl ether	20.0	20.6	ug/L	103	65 - 126	
Methylcyclohexane	20.0	21.1	ug/L	106	62 - 136	

Eurofins Canton

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Job ID: 240-167051-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 240-528486/5

Matrix: Water

Methylene Chloride

Tetrachloroethene

Trichloroethene

Vinyl chloride

Xylenes, Total

o-Xylene

trans-1,2-Dichloroethene

trans-1,3-Dichloropropene

Trichlorofluoromethane

m-Xylene & p-Xylene

Styrene

Toluene

Analysis Batch: 528486

Client Sample ID: Lab Control Sample Prep Type: Total/NA

112

112

80 - 120

80 - 123

LCS LCS Spike %Rec D %Rec Added Result Qualifier Unit Limits 20.0 19.4 ug/L 97 71 - 125 20.0 22.3 ug/L 112 80 - 135 20.0 76 - 123 21.3 ug/L 106 20.0 21.2 ug/L 106 80 - 123 20.0 20.4 ug/L 102 75 - 124 20.0 23.0 ug/L 115 57 - 129 20.0 19.5 ug/L 98 70 - 122 20.0 90 18.0 ug/L 30 - 17020.0 19.4 97 60 - 144 ug/L 40.0 44.7 ug/L 112 80 - 121

ug/L

ug/L

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
Toluene-d8 (Surr)	107		78 - 122
Dibromofluoromethane (Surr)	94		73 - 120
4-Bromofluorobenzene (Surr)	110		56 - 136
1,2-Dichloroethane-d4 (Surr)	97		62 - 137

Lab Sample ID: MB 240-528862/8 Client Sample ID: Method Blank **Matrix: Water** Prep Type: Total/NA

22.3

22.4

20.0

20.0

Analysis Batch: 528862

MB MB

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	ug/L			06/02/22 11:28	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	ug/L			06/02/22 11:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	ug/L			06/02/22 11:28	1
1,1,2-Trichloroethane	1.0	U	1.0	ug/L			06/02/22 11:28	1
1,1-Dichloroethane	1.0	U	1.0	ug/L			06/02/22 11:28	1
1,1-Dichloroethene	1.0	U	1.0	ug/L			06/02/22 11:28	1
1,2,4-Trichlorobenzene	1.0	U	1.0	ug/L			06/02/22 11:28	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	ug/L			06/02/22 11:28	1
Ethylene Dibromide	1.0	U	1.0	ug/L			06/02/22 11:28	1
1,2-Dichlorobenzene	1.0	U	1.0	ug/L			06/02/22 11:28	1
1,2-Dichloroethane	1.0	U	1.0	ug/L			06/02/22 11:28	1
1,2-Dichloropropane	1.0	U	1.0	ug/L			06/02/22 11:28	1
1,3-Dichlorobenzene	1.0	U	1.0	ug/L			06/02/22 11:28	1
1,4-Dichlorobenzene	1.0	U	1.0	ug/L			06/02/22 11:28	1
2-Butanone (MEK)	10	U	10	ug/L			06/02/22 11:28	1
2-Hexanone	10	U	10	ug/L			06/02/22 11:28	1
4-Methyl-2-pentanone (MIBK)	10	U	10	ug/L			06/02/22 11:28	1
Acetone	10	U	10	ug/L			06/02/22 11:28	1
Benzene	1.0	U	1.0	ug/L			06/02/22 11:28	1
Dichlorobromomethane	1.0	U	1.0	ug/L			06/02/22 11:28	1
Bromoform	1.0	U	1.0	ug/L			06/02/22 11:28	1
Bromomethane	1.0	U	1.0	ug/L			06/02/22 11:28	1
Carbon disulfide	1.0	U	1.0	ug/L			06/02/22 11:28	1
Carbon tetrachloride	1.0	U	1.0	ug/L			06/02/22 11:28	1

Eurofins Canton

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6/7/2022

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 240-528862/8

Matrix: Water

Analysis Batch: 528862

Client Sample ID: Method Blank

Prep Type: Total/NA

-	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	1.0	U	1.0	ug/L			06/02/22 11:28	1
Chloroethane	1.0	U	1.0	ug/L			06/02/22 11:28	1
Chloroform	1.0	U	1.0	ug/L			06/02/22 11:28	1
Chloromethane	1.0	U	1.0	ug/L			06/02/22 11:28	1
cis-1,2-Dichloroethene	1.0	U	1.0	ug/L			06/02/22 11:28	1
cis-1,3-Dichloropropene	1.0	U	1.0	ug/L			06/02/22 11:28	1
Cyclohexane	1.0	U	1.0	ug/L			06/02/22 11:28	1
Chlorodibromomethane	1.0	U	1.0	ug/L			06/02/22 11:28	1
Dichlorodifluoromethane	1.0	U	1.0	ug/L			06/02/22 11:28	1
Ethylbenzene	1.0	U	1.0	ug/L			06/02/22 11:28	1
Isopropylbenzene	1.0	U	1.0	ug/L			06/02/22 11:28	1
Methyl acetate	10	U	10	ug/L			06/02/22 11:28	1
Methyl tert-butyl ether	1.0	U	1.0	ug/L			06/02/22 11:28	1
Methylcyclohexane	1.0	U	1.0	ug/L			06/02/22 11:28	1
Methylene Chloride	5.0	U	5.0	ug/L			06/02/22 11:28	1
Styrene	1.0	U	1.0	ug/L			06/02/22 11:28	1
Tetrachloroethene	1.0	U	1.0	ug/L			06/02/22 11:28	1
Toluene	1.0	U	1.0	ug/L			06/02/22 11:28	1
trans-1,2-Dichloroethene	1.0	U	1.0	ug/L			06/02/22 11:28	1
trans-1,3-Dichloropropene	1.0	U	1.0	ug/L			06/02/22 11:28	1
Trichloroethene	1.0	U	1.0	ug/L			06/02/22 11:28	1
Trichlorofluoromethane	1.0	U	1.0	ug/L			06/02/22 11:28	1
Vinyl chloride	1.0	U	1.0	ug/L			06/02/22 11:28	1
Xylenes, Total	2.0	U	2.0	ug/L			06/02/22 11:28	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		78 - 122		06/02/22 11:28	1
Dibromofluoromethane (Surr)	114		73 - 120		06/02/22 11:28	1
4-Bromofluorobenzene (Surr)	99		56 - 136		06/02/22 11:28	1
1,2-Dichloroethane-d4 (Surr)	104		62 - 137		06/02/22 11:28	1

Lab Sample ID: LCS 240-528862/5

Matrix: Water

Analysis Batch: 528862

Client Sample ID: Lab Control Sample Prep Type: Total/NA

Allalysis Datcii. 320002								
	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,1,1-Trichloroethane	20.0	19.4		ug/L		97	64 - 131	
1,1,2,2-Tetrachloroethane	20.0	19.9		ug/L		99	58 - 157	
1,1,2-Trichloro-1,2,2-trifluoroetha	20.0	23.6		ug/L		118	51 - 146	
ne								
1,1,2-Trichloroethane	20.0	20.6		ug/L		103	70 - 138	
1,1-Dichloroethane	20.0	20.4		ug/L		102	72 - 127	
1,1-Dichloroethene	20.0	22.6		ug/L		113	63 - 134	
1,2,4-Trichlorobenzene	20.0	20.0		ug/L		100	44 - 147	
1,2-Dibromo-3-Chloropropane	20.0	18.6		ug/L		93	53 - 135	
Ethylene Dibromide	20.0	19.6		ug/L		98	71 - 134	
1,2-Dichlorobenzene	20.0	21.2		ug/L		106	78 - 120	
1,2-Dichloroethane	20.0	18.0		ug/L		90	66 - 128	
1,2-Dichloropropane	20.0	21.0		ug/L		105	75 - 133	
				-				

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Eurofins Canton

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Job ID: 240-167051-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 240-528862/5

Matrix: Water

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analysis Batch: 528862								
	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,3-Dichlorobenzene	20.0	20.9		ug/L		104	80 - 120	

1.3-Dichlorobenzene 20.0 20.9 ug/L 104 80.120 2-Butanone (MEK) 40.0 33.6 ug/L 103 80.120 2-Butanone (MEK) 40.0 33.6 ug/L 93 43.167 2-Butanone (MEK) 40.0 33.6 ug/L 93 43.167 3-Butanone (MIBK) 40.0 36.6 ug/L 96 50.149 96 50.149 97 50.149 97 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149 98 50.149	Analyte	Added	Result	Qualifier Unit	D %Rec	Limits	
2-Butanone (MEK)	1,3-Dichlorobenzene	20.0	20.9	ug/L	104	80 - 120	
2-Hexanone	1,4-Dichlorobenzene	20.0	20.6	ug/L	103	80 - 120	
4-Methyl-2-pentanone (MIBK) 40.0 36.6 ug/L 91 46.158 Acetone 40.0 38.2 ug/L 107 77.123 Benzene 20.0 21.5 ug/L 107 77.123 Dichlorobromethane 20.0 18.8 ug/L 94 57.129 Bromoform 20.0 18.8 ug/L 94 57.129 Bromoform 20.0 14.3 ug/L 13 43.140 Carbon disulfide 20.0 22.6 ug/L 188 55.137 Chlorobromethane 20.0 19.5 ug/L 98 55.137 Chlorobromethane 20.0 20.7 ug/L 104 80.121 Chlorobromethane 20.0 19.3 ug/L 96 38.152 Chlorodiromethane 20.0 19.1 ug/L 96 74.122 cis-1,3-Dichloropropene 20.0 21.9 ug/L 19 64.130 Cyclohexane 20.0 23.7 u	2-Butanone (MEK)	40.0	33.6	ug/L	84	54 - 156	
Acetone 40.0 38.2 ug/L 96 50.149 Benzene 20.0 21.5 ug/L 107 77-123 Dichlorobromethane 20.0 19.2 ug/L 96 69-126 Bromoform 20.0 18.8 ug/L 94 57-129 Bromomethane 20.0 14.3 ug/L 13 43-140 Carbon disulfide 20.0 22.6 ug/L 18 55-137 Chiorobenzene 20.0 29.7 ug/L 98 55-137 Chioroform 20.0 19.5 ug/L 98 55-137 Chioroform 20.0 19.1 ug/L 98 55-137 Chioroform 20.0 19.1 ug/L 96 74-122 Chioroform 20.0 19.1 ug/L 96 74-122 Chioroformethane 20.0 19.8 ug/L 19.8 14.1 Chiorodibromomethane 20.0 23.7 ug/L 19.8	2-Hexanone	40.0	37.2	ug/L	93	43 - 167	
Benzene 20.0 21.5 ug/L 107 77 - 123 Dichlorobrommethane 20.0 19.2 ug/L 96 69 - 126 Bromoform 20.0 18.8 ug/L 94 57 - 129 Bromomethane 20.0 14.3 ug/L 72 36 - 142 Carbon disulfide 20.0 22.6 ug/L 131 43 - 140 Carbon tetrachloride 20.0 29.7 ug/L 104 80 - 121 Chloroethane 20.0 19.3 ug/L 96 38 - 152 Chloroefthane 20.0 19.3 ug/L 96 74 - 122 Chloroform 20.0 19.3 ug/L 96 74 - 122 Chlorodibromembane 20.0 19.3 ug/L 96 74 - 122 Chlorodibropropene 20.0 19.9 ug/L 19.9 64 - 130 Cyclobexane 20.0 22.8 ug/L 114 34 + 153 Ethylbenzene 20.0 22.8	4-Methyl-2-pentanone (MIBK)	40.0	36.6	ug/L	91	46 - 158	
Dichlorobromomethane 20.0 19.2 ug/L 96 69 - 126 Bromoform 20.0 18.8 ug/L 94 57 - 129 Bromomethane 20.0 14.3 ug/L 72 36 - 142 Carbon disulfide 20.0 22.6 ug/L 113 43 - 140 Carbon tetrachloride 20.0 19.5 ug/L 98 55 - 137 Chlorobenzene 20.0 20.7 ug/L 104 80 - 121 Chloroform 20.0 19.3 ug/L 96 88 - 152 Chloroform 20.0 19.1 ug/L 96 74 - 122 Chloroformethane 20.0 19.1 ug/L 196 74 - 122 Chloroformethane 20.0 20.6 ug/L 103 77 - 123 cis-1,3-Dichloropropene 20.0 21.9 ug/L 199 64 - 130 Cyclohexane 20.0 19.8 ug/L 199 70 - 124 Dichlorodifluoromethane 20.0	Acetone	40.0	38.2	ug/L	96	50 - 149	
Bromoform 20.0 18.8 ug/L 94 57.129 Bromomethane 20.0 14.3 ug/L 72 36.142 Carbon disulfide 20.0 22.6 ug/L 113 43.140 Carbon tetrachloride 20.0 19.5 ug/L 98 55.137 Chlorobenzene 20.0 19.3 ug/L 96 38.152 Chloromethane 20.0 19.1 ug/L 96 74.122 Chloromethane 20.0 19.4 ug/L 96 74.122 Chloromethane 20.0 19.4 ug/L 103 77.123 cis-1,3-Dichloropropene 20.0 19.9 ug/L 99 64.130 Cyclohexane 20.0 23.7 ug/L 118 58.146 Chlorodibromomethane 20.0 21.8 ug/L 194 65.126 Chlorodibromomethane 20.0 21.4 ug/L 107 80.121 Isopropylbenzere 20.0 21.4	Benzene	20.0	21.5	ug/L	107	77 - 123	
Bromomethane 20.0 14.3 ug/L 72 36.142 Carbon disulfide 20.0 22.6 ug/L 113 43.140 Carbon tetrachloride 20.0 19.5 ug/L 98 55.137 Chloroethane 20.0 20.7 ug/L 104 80.121 Chloroethane 20.0 19.3 ug/L 96 38.152 Chloromethane 20.0 19.1 ug/L 96 74.122 Chloromethane 20.0 19.1 ug/L 103 77.123 cis-1,2-Dichloroethene 20.0 20.6 ug/L 103 77.123 cis-1,3-Dichloropropene 20.0 29.6 ug/L 199 64.130 Cyclohexane 20.0 23.7 ug/L 118 58.146 Chlorodibromomethane 20.0 21.8 ug/L 199 70.124 Dichlorodibromomethane 20.0 21.4 ug/L 107 80.121 Ethylbenzene 20.0 21.	Dichlorobromomethane	20.0	19.2	ug/L	96	69 - 126	
Carbon disulfide 20.0 22.6 ug/L 113 43.140 Carbon tetrachloride 20.0 19.5 ug/L 98 55.137 Chlorobenzene 20.0 20.7 ug/L 104 80.121 Chloroform 20.0 19.1 ug/L 96 38.152 Chloroform 20.0 14.4 ug/L 72 47.143 cis-1,2-Dichloroethene 20.0 14.4 ug/L 103 77.123 cis-1,2-Dichloroptopene 20.0 20.6 ug/L 103 77.123 cis-1,3-Dichloroptopene 20.0 19.9 ug/L 103 77.123 cis-1,3-Dichloroptopene 20.0 23.7 ug/L 118 58.146 Chlorodibromomethane 20.0 19.8 ug/L 99 70.124 Dichloroptimene 20.0 21.4 ug/L 107 80.121 Ethylbenzene 20.0 21.9 ug/L 109 74.128 Methyl tert-butyl ether 20.	Bromoform	20.0	18.8	ug/L	94	57 - 129	
Carbon tetrachloride 20.0 19.5 ug/L 98 55-137 Chlorobenzene 20.0 20.7 ug/L 104 80-121 Chlorofethane 20.0 19.3 ug/L 96 38-152 Chloromethane 20.0 19.1 ug/L 96 74-122 Chloromethane 20.0 14.4 ug/L 72 47-143 cis-1,3-Dichloropropene 20.0 20.6 ug/L 193 77-123 cis-1,3-Dichloropropene 20.0 19.9 ug/L 199 64-130 Cyclohexane 20.0 21.9 ug/L 199 70-124 Chlorodibromomethane 20.0 21.4 ug/L 114 34-153 Ethylbenzene 20.0 21.4 ug/L 107 80-121 Isopropylbenzene 20.0 21.4 ug/L 109 74-128 Methyl tetr-butyl ether 20.0 18.7 ug/L 19 65-126 Methylylcyclohexane 20.0	Bromomethane	20.0	14.3	ug/L	72	36 - 142	
Chlorobenzene 20.0 20.7 ug/L 104 80-121 Chloroethane 20.0 19.3 ug/L 96 38.152 Chloroform 20.0 19.1 ug/L 96 38.152 Chloromethane 20.0 14.4 ug/L 72 47.143 cis-1,2-Dichloroethene 20.0 20.6 ug/L 103 77-123 cis-1,3-Dichloropropene 20.0 19.9 ug/L 199 64.130 Cyclobexane 20.0 23.7 ug/L 118 58.146 Chlorodibromoethane 20.0 19.8 ug/L 199 70.124 Dichlorodifluoromethane 20.0 21.8 ug/L 114 34.153 Ethylbenzene 20.0 21.4 ug/L 107 80.121 Isopropylbenzene 20.0 21.9 ug/L 109 74.128 Methyl cetate 40.0 33.8 ug/L 45 42.169 Methyl cetate 20.0 18.7	Carbon disulfide	20.0	22.6	ug/L	113	43 - 140	
Chloroethane 20.0 19.3 ug/L 96 38.152 Chloroform 20.0 19.1 ug/L 96 74.122 Chloromethane 20.0 14.4 ug/L 72 47.143 cis-1,2-Dichloroptoethene 20.0 20.6 ug/L 19.3 77.123 cis-1,3-Dichloropropene 20.0 19.9 ug/L 19.9 64.130 Cyclohexane 20.0 23.7 ug/L 118 58.146 Chlorodifloromethane 20.0 19.8 ug/L 19.9 70.124 Dichlorodifluoromethane 20.0 22.8 ug/L 114 34.153 Ethylbenzene 20.0 22.8 ug/L 19.7 70.124 Dichlorodifluoromethane 20.0 22.8 ug/L 114 34.153 Ethylbenzene 20.0 22.8 ug/L 117 36.121 Isopropylbenzene 20.0 18.7 ug/L 49.7 465.126 Methyl tert-butyl ether 20.	Carbon tetrachloride	20.0	19.5	ug/L	98	55 - 137	
Chloroform 20.0 19.1 ug/L 96 74.122 Chloromethane 20.0 14.4 ug/L 72 47.143 cis-1,2-Dichloroethene 20.0 20.6 ug/L 103 77.123 cis-1,3-Dichloropropene 20.0 19.9 ug/L 199 64.130 Cyclohexane 20.0 23.7 ug/L 118 58.146 Chlorodibromomethane 20.0 19.8 ug/L 99 70.124 Dichlorodifluoromethane 20.0 22.8 ug/L 107 80.121 Stephylbenzene 20.0 21.4 ug/L 107 80.121 Isopropylbenzene 20.0 21.9 ug/L 109 74.128 Methyl acetate 40.0 33.8 ug/L 45 42.169 Methyl cether 20.0 18.7 ug/L 46 5.126 Methylucyclohexane 20.0 18.7 ug/L 49 65.126 Methylucyclohexane 20.0 <td< td=""><td>Chlorobenzene</td><td>20.0</td><td>20.7</td><td>ug/L</td><td>104</td><td>80 - 121</td><td></td></td<>	Chlorobenzene	20.0	20.7	ug/L	104	80 - 121	
Chloromethane 20.0 14.4 ug/L 72 47 - 143 cis-1,2-Dichloroethene 20.0 20.6 ug/L 103 77 - 123 cis-1,3-Dichloropropene 20.0 19.9 ug/L 99 64 - 130 Cycloexane 20.0 23.7 ug/L 118 58 - 146 Chlorodibromoethane 20.0 19.8 ug/L 199 70 - 124 Dichlorodifluoromethane 20.0 22.8 ug/L 114 34 - 153 Ethylbenzene 20.0 21.4 ug/L 107 80 - 121 Isopropylbenzene 20.0 21.9 ug/L 109 74 - 128 Methyl scetate 40.0 33.8 ug/L 85 42 - 169 Methyle tert-butyl ether 20.0 18.7 ug/L 10 65 - 126 Methylese Chloride 20.0 22.1 ug/L 110 65 - 126 Methylese Chloride 20.0 22.6 ug/L 113 80 - 123 Styrene	Chloroethane	20.0	19.3	ug/L	96	38 - 152	
cis-1,2-Dichloroethene 20.0 20.6 ug/L 103 77-123 cis-1,3-Dichloropropene 20.0 19.9 ug/L 99 64-130 Cyclohexane 20.0 23.7 ug/L 118 58-146 Chlorodibromomethane 20.0 19.8 ug/L 99 70-124 Dichlorodifluoromethane 20.0 22.8 ug/L 114 34-153 Ethylbenzene 20.0 21.4 ug/L 107 80-121 Isopropylbenzene 20.0 21.9 ug/L 109 74-128 Methyl acetate 40.0 33.8 ug/L 85 42-169 Methyl tert-butyl ether 20.0 18.7 ug/L 94 65-126 Methylcyclohexane 20.0 22.1 ug/L 110 62-136 Methylcyclohexane 20.0 22.1 ug/L 199 71-125 Styrene 20.0 22.6 ug/L 113 80-135 Etrachloroethene 20.0	Chloroform	20.0	19.1	ug/L	96	74 - 122	
cis-1,3-Dichloropropene 20.0 19.9 ug/L 99 64-130 Cyclohexane 20.0 23.7 ug/L 118 58-146 Chlorodibromomethane 20.0 19.8 ug/L 99 70-124 Dichlorodifluoromethane 20.0 22.8 ug/L 114 34-153 Ethylbenzene 20.0 21.4 ug/L 107 80-121 Isopropylbenzene 20.0 21.9 ug/L 109 74-128 Methyl acetate 40.0 33.8 ug/L 85 42-169 Methyl tert-butyl ether 40.0 33.8 ug/L 94 65-126 Methylene Chloride 20.0 18.7 ug/L 110 62-136 Methylene Chloride 20.0 22.1 ug/L 19 71-125 Styrene 20.0 22.6 ug/L 113 80-133 Tetrachloroethene 20.0 21.5 ug/L 109 76-123 Tuseloroethene 20.0	Chloromethane	20.0	14.4	ug/L	72	47 - 143	
Cyclohexane 20.0 23.7 ug/L 118 58 - 146 Chlorodibromomethane 20.0 19.8 ug/L 99 70 - 124 Dichlorodifluoromethane 20.0 22.8 ug/L 114 34 - 153 Ethylbenzene 20.0 21.4 ug/L 107 80 - 121 Isopropylbenzene 20.0 21.9 ug/L 109 74 - 128 Methyl acetate 40.0 33.8 ug/L 85 42 - 169 Methyl tert-butyl ether 20.0 18.7 ug/L 94 65 - 126 Methyleyclohexane 20.0 22.1 ug/L 110 62 - 136 Methylene Chloride 20.0 19.8 ug/L 199 71 - 125 Styrene 20.0 22.6 ug/L 113 80 - 133 Tetrachloroethene 20.0 21.9 ug/L 109 76 - 123 Toluene 20.0 21.9 ug/L 104 75 - 124 trans-1,2-Dichloroethene 20.0 20.7 ug/L 104 75 - 124 trans-1,3-Dichl	cis-1,2-Dichloroethene	20.0	20.6	ug/L	103	77 - 123	
Chlorodibromomethane 20.0 19.8 ug/L 99 70 - 124 Dichlorodifluoromethane 20.0 22.8 ug/L 114 34 - 153 Ethylbenzene 20.0 21.4 ug/L 107 80 - 121 Isopropylbenzene 20.0 21.9 ug/L 109 74 - 128 Methyl acetate 40.0 33.8 ug/L 85 42 - 169 Methyl tert-butyl ether 20.0 18.7 ug/L 94 65 - 126 Methylocyclohexane 20.0 22.1 ug/L 110 62 - 136 Methylene Chloride 20.0 19.8 ug/L 99 71 - 125 Styrene 20.0 22.6 ug/L 113 80 - 133 Tetrachloroethene 20.0 21.9 ug/L 109 76 - 123 Toluene 20.0 21.5 ug/L 104 75 - 124 trans-1,2-Dichloroethene 20.0 20.7 ug/L 104 75 - 124 trans-1,3-Dichloropropene 20.0 20.1 ug/L 105 70 - 122 T	cis-1,3-Dichloropropene	20.0	19.9	ug/L	99	64 - 130	
Dichlorodifluoromethane 20.0 22.8 ug/L 114 34 - 153 Ethylbenzene 20.0 21.4 ug/L 107 80 - 121 Isopropylbenzene 20.0 21.9 ug/L 109 74 - 128 Methyl acetate 40.0 33.8 ug/L 85 42 - 169 Methyl tert-butyl ether 20.0 18.7 ug/L 94 65 - 126 Methylcyclohexane 20.0 22.1 ug/L 110 62 - 136 Methylene Chloride 20.0 19.8 ug/L 99 71 - 125 Styrene 20.0 22.6 ug/L 113 80 - 135 Tetrachloroethene 20.0 21.9 ug/L 109 76 - 123 Toluene 20.0 21.5 ug/L 104 75 - 124 trans-1,2-Dichloroethene 20.0 20.1 ug/L 104 75 - 129 Trichloroethene 20.0 21.0 ug/L 101 57 - 129 Trichlorofluoromethane	Cyclohexane	20.0	23.7	ug/L	118	58 - 146	
Ethylbenzene 20.0 21.4 ug/L 107 80 - 121 Isopropylbenzene 20.0 21.9 ug/L 109 74 - 128 Methyl acetate 40.0 33.8 ug/L 85 42 - 169 Methyl tert-butyl ether 20.0 18.7 ug/L 94 65 - 126 Methylcyclohexane 20.0 22.1 ug/L 110 62 - 136 Methylene Chloride 20.0 19.8 ug/L 99 71 - 125 Styrene 20.0 22.6 ug/L 113 80 - 135 Tetrachloroethene 20.0 21.9 ug/L 109 76 - 123 Toluene 20.0 21.5 ug/L 108 80 - 123 trans-1,2-Dichloroethene 20.0 20.7 ug/L 104 75 - 124 trans-1,3-Dichloropropene 20.0 20.1 ug/L 101 57 - 129 Trichloroethene 20.0 21.0 ug/L 105 70 - 122 Trichlorofluoromethane 20.0 19.4 ug/L 75 60 - 144 Vinyl ch	Chlorodibromomethane	20.0	19.8	ug/L	99	70 - 124	
Sopropylbenzene 20.0 21.9 ug/L 109 74 - 128 Methyl acetate 40.0 33.8 ug/L 85 42 - 169 Methyl tert-butyl ether 20.0 18.7 ug/L 94 65 - 126 Methylcyclohexane 20.0 22.1 ug/L 110 62 - 136 Methylene Chloride 20.0 19.8 ug/L 99 71 - 125 Methylene Chloride 20.0 22.6 ug/L 113 80 - 135 Methylene Chloroethene 20.0 21.9 ug/L 109 76 - 123 Methylene Chloroethene 20.0 21.5 ug/L 109 76 - 123 Methylene Chloroethene 20.0 21.5 ug/L 108 80 - 123 Methylene Chloroethene 20.0 20.7 ug/L 104 75 - 124 Methylene Chloroethene 20.0 20.1 ug/L 101 57 - 129 Methylene Chloroethene 20.0 21.0 ug/L 105 70 - 122 Methylene Chloroethene 20.0 21.0 ug/L 20.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0	Dichlorodifluoromethane	20.0	22.8	ug/L	114	34 - 153	
Methyl acetate 40.0 33.8 ug/L 85 42-169 Methyl tert-butyl ether 20.0 18.7 ug/L 94 65-126 Methylcyclohexane 20.0 22.1 ug/L 110 62-136 Methylene Chloride 20.0 19.8 ug/L 99 71-125 Styrene 20.0 22.6 ug/L 113 80-135 Tetrachloroethene 20.0 21.9 ug/L 109 76-123 Toluene 20.0 21.5 ug/L 108 80-123 trans-1,2-Dichloroethene 20.0 20.7 ug/L 104 75-124 trans-1,3-Dichloropropene 20.0 20.1 ug/L 101 57-129 Trichlorofluoromethane 20.0 21.0 ug/L 105 70-122 Trichloride 20.0 19.4 ug/L 97 30-170 Vinyl chloride 20.0 14.9 ug/L 75 60-144 Xylenes, Total 40.0 43.8 ug/L 110 80-121 m-Xylene & p-Xylene 20.0	Ethylbenzene	20.0	21.4	ug/L	107	80 - 121	
Methyl tert-butyl ether 20.0 18.7 ug/L 94 65 - 126 Methylcyclohexane 20.0 22.1 ug/L 110 62 - 136 Methylene Chloride 20.0 19.8 ug/L 99 71 - 125 Styrene 20.0 22.6 ug/L 113 80 - 135 Tetrachloroethene 20.0 21.9 ug/L 109 76 - 123 Toluene 20.0 21.5 ug/L 108 80 - 123 trans-1,2-Dichloroethene 20.0 20.7 ug/L 104 75 - 124 trans-1,3-Dichloropropene 20.0 20.1 ug/L 101 57 - 129 Trichlorofluoromethane 20.0 21.0 ug/L 105 70 - 122 Trichloride 20.0 19.4 ug/L 97 30 - 170 Vinyl chloride 20.0 14.9 ug/L 75 60 - 144 Xylenes, Total 40.0 43.8 ug/L 110 80 - 121 m-Xylene & p-Xylene 20.0 22.5 ug/L 113 80 - 120	Isopropylbenzene	20.0	21.9	ug/L	109	74 - 128	
Methylcyclohexane 20.0 22.1 ug/L 110 62 - 136 Methylene Chloride 20.0 19.8 ug/L 99 71 - 125 Styrene 20.0 22.6 ug/L 113 80 - 135 Tetrachloroethene 20.0 21.9 ug/L 109 76 - 123 Toluene 20.0 21.5 ug/L 108 80 - 123 trans-1,2-Dichloroethene 20.0 20.7 ug/L 104 75 - 124 trans-1,3-Dichloropropene 20.0 20.1 ug/L 101 57 - 129 Trichloroethene 20.0 21.0 ug/L 105 70 - 122 Trichlorofluoromethane 20.0 19.4 ug/L 97 30 - 170 Vinyl chloride 20.0 14.9 ug/L 75 60 - 144 Xylenes, Total 40.0 43.8 ug/L 110 80 - 121 m-Xylene & p-Xylene 20.0 22.5 ug/L 113 80 - 120	Methyl acetate	40.0	33.8	ug/L	85	42 - 169	
Methylene Chloride 20.0 19.8 ug/L 99 71 - 125 Styrene 20.0 22.6 ug/L 113 80 - 135 Tetrachloroethene 20.0 21.9 ug/L 109 76 - 123 Toluene 20.0 21.5 ug/L 108 80 - 123 trans-1,2-Dichloroethene 20.0 20.7 ug/L 104 75 - 124 trans-1,3-Dichloropropene 20.0 20.1 ug/L 101 57 - 129 Trichloroethene 20.0 21.0 ug/L 105 70 - 122 Trichlorofluoromethane 20.0 19.4 ug/L 97 30 - 170 Vinyl chloride 20.0 14.9 ug/L 75 60 - 144 Xylenes, Total 40.0 43.8 ug/L 110 80 - 121 m-Xylene & p-Xylene 20.0 22.5 ug/L 113 80 - 120	Methyl tert-butyl ether	20.0	18.7	ug/L	94	65 - 126	
Styrene 20.0 22.6 ug/L 113 80 - 135 Tetrachloroethene 20.0 21.9 ug/L 109 76 - 123 Toluene 20.0 21.5 ug/L 108 80 - 123 trans-1,2-Dichloroethene 20.0 20.7 ug/L 104 75 - 124 trans-1,3-Dichloropropene 20.0 20.1 ug/L 101 57 - 129 Trichloroethene 20.0 21.0 ug/L 105 70 - 122 Trichlorofluoromethane 20.0 19.4 ug/L 97 30 - 170 Vinyl chloride 20.0 14.9 ug/L 75 60 - 144 Xylenes, Total 40.0 43.8 ug/L 110 80 - 121 m-Xylene & p-Xylene 20.0 22.5 ug/L 113 80 - 120	Methylcyclohexane	20.0	22.1	ug/L	110	62 - 136	
Tetrachloroethene 20.0 21.9 ug/L 109 76 - 123 Toluene 20.0 21.5 ug/L 108 80 - 123 trans-1,2-Dichloroethene 20.0 20.7 ug/L 104 75 - 124 trans-1,3-Dichloropropene 20.0 20.1 ug/L 101 57 - 129 Trichloroethene 20.0 21.0 ug/L 105 70 - 122 Trichlorofluoromethane 20.0 19.4 ug/L 97 30 - 170 Vinyl chloride 20.0 14.9 ug/L 75 60 - 144 Xylenes, Total 40.0 43.8 ug/L 110 80 - 121 m-Xylene & p-Xylene 20.0 22.5 ug/L 113 80 - 120	Methylene Chloride	20.0	19.8	ug/L	99	71 - 125	
Toluene 20.0 21.5 ug/L 108 80 - 123 trans-1,2-Dichloroethene 20.0 20.7 ug/L 104 75 - 124 trans-1,3-Dichloropropene 20.0 20.1 ug/L 101 57 - 129 Trichloroethene 20.0 21.0 ug/L 105 70 - 122 Trichlorofluoromethane 20.0 19.4 ug/L 97 30 - 170 Vinyl chloride 20.0 14.9 ug/L 75 60 - 144 Xylenes, Total 40.0 43.8 ug/L 110 80 - 121 m-Xylene & p-Xylene 20.0 22.5 ug/L 113 80 - 120	Styrene	20.0	22.6	ug/L	113	80 - 135	
trans-1,2-Dichloroethene 20.0 20.7 ug/L 104 75 - 124 trans-1,3-Dichloropropene 20.0 20.1 ug/L 101 57 - 129 Trichloroethene 20.0 21.0 ug/L 105 70 - 122 Trichlorofluoromethane 20.0 19.4 ug/L 97 30 - 170 Vinyl chloride 20.0 14.9 ug/L 75 60 - 144 Xylenes, Total 40.0 43.8 ug/L 110 80 - 121 m-Xylene & p-Xylene 20.0 22.5 ug/L 113 80 - 120	Tetrachloroethene	20.0	21.9	ug/L	109	76 - 123	
trans-1,3-Dichloropropene 20.0 20.1 ug/L 101 57 - 129 Trichloroethene 20.0 21.0 ug/L 105 70 - 122 Trichlorofluoromethane 20.0 19.4 ug/L 97 30 - 170 Vinyl chloride 20.0 14.9 ug/L 75 60 - 144 Xylenes, Total 40.0 43.8 ug/L 110 80 - 121 m-Xylene & p-Xylene 20.0 22.5 ug/L 113 80 - 120	Toluene	20.0	21.5	ug/L	108	80 - 123	
Trichloroethene 20.0 21.0 ug/L 105 70 - 122 Trichlorofluoromethane 20.0 19.4 ug/L 97 30 - 170 Vinyl chloride 20.0 14.9 ug/L 75 60 - 144 Xylenes, Total 40.0 43.8 ug/L 110 80 - 121 m-Xylene & p-Xylene 20.0 22.5 ug/L 113 80 - 120	trans-1,2-Dichloroethene	20.0	20.7	ug/L	104	75 - 124	
Trichlorofluoromethane 20.0 19.4 ug/L 97 30 - 170 Vinyl chloride 20.0 14.9 ug/L 75 60 - 144 Xylenes, Total 40.0 43.8 ug/L 110 80 - 121 m-Xylene & p-Xylene 20.0 22.5 ug/L 113 80 - 120	trans-1,3-Dichloropropene	20.0	20.1	ug/L	101	57 - 129	
Vinyl chloride 20.0 14.9 ug/L 75 60 - 144 Xylenes, Total 40.0 43.8 ug/L 110 80 - 121 m-Xylene & p-Xylene 20.0 22.5 ug/L 113 80 - 120	Trichloroethene	20.0	21.0	ug/L	105	70 - 122	
Xylenes, Total 40.0 43.8 ug/L 110 80 - 121 m-Xylene & p-Xylene 20.0 22.5 ug/L 113 80 - 120	Trichlorofluoromethane	20.0	19.4	ug/L	97	30 - 170	
m-Xylene & p-Xylene 20.0 22.5 ug/L 113 80 - 120	Vinyl chloride	20.0	14.9	ug/L	75	60 - 144	
	Xylenes, Total	40.0	43.8	ug/L	110	80 - 121	
	m-Xylene & p-Xylene	20.0	22.5	ug/L	113	80 - 120	
	o-Xylene			ug/L	107	80 - 123	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
Toluene-d8 (Surr)	99		78 - 122
Dibromofluoromethane (Surr)	94		73 - 120
4-Bromofluorobenzene (Surr)	105		56 - 136
1,2-Dichloroethane-d4 (Surr)	88		62 - 137

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Job ID: 240-167051-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 240-528938/7

Matrix: Water

Analysis Batch: 528938

Client Sample ID: Method Blan	k
Prep Type: Total/N	Α

Amaluta		MB Qualifier	DI	I Imit		Duamanad	A malumed	Dil Foo
Analyte	1.0		RL 1.0	Unit	D	Prepared	Analyzed 06/02/22 13:37	Dil Fac
1,1,1-Trichloroethane	1.0			ug/L				-
1,1,2,2-Tetrachloroethane			1.0	ug/L			06/02/22 13:37 06/02/22 13:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0		1.0	ug/L				1
1,1,2-Trichloroethane	1.0		1.0	ug/L			06/02/22 13:37	1
1,1-Dichloroethane	1.0		1.0	ug/L			06/02/22 13:37	1
1,1-Dichloroethene	1.0		1.0	ug/L			06/02/22 13:37	1
1,2,4-Trichlorobenzene	1.0		1.0	ug/L			06/02/22 13:37	1
1,2-Dibromo-3-Chloropropane	2.0		2.0	ug/L			06/02/22 13:37	1
Ethylene Dibromide	1.0		1.0	ug/L			06/02/22 13:37	1
1,2-Dichlorobenzene	1.0		1.0	ug/L			06/02/22 13:37	1
1,2-Dichloroethane	1.0		1.0	ug/L			06/02/22 13:37	1
1,2-Dichloropropane	1.0		1.0	ug/L			06/02/22 13:37	1
1,3-Dichlorobenzene	1.0		1.0	ug/L			06/02/22 13:37	1
1,4-Dichlorobenzene	1.0	U	1.0	ug/L			06/02/22 13:37	1
2-Butanone (MEK)	10	U	10	ug/L			06/02/22 13:37	1
2-Hexanone	10	U	10	ug/L			06/02/22 13:37	1
4-Methyl-2-pentanone (MIBK)	10	U	10	ug/L			06/02/22 13:37	1
Acetone	10	U	10	ug/L			06/02/22 13:37	1
Benzene	1.0	U	1.0	ug/L			06/02/22 13:37	1
Dichlorobromomethane	1.0	U	1.0	ug/L			06/02/22 13:37	1
Bromoform	1.0	U	1.0	ug/L			06/02/22 13:37	1
Bromomethane	1.0	Ü	1.0	ug/L			06/02/22 13:37	1
Carbon disulfide	1.0	U	1.0	ug/L			06/02/22 13:37	1
Carbon tetrachloride	1.0	U	1.0	ug/L			06/02/22 13:37	1
Chlorobenzene	1.0	U	1.0	ug/L			06/02/22 13:37	1
Chloroethane	1.0	U	1.0	ug/L			06/02/22 13:37	1
Chloroform	1.0	U	1.0	ug/L			06/02/22 13:37	1
Chloromethane	1.0	U	1.0	ug/L			06/02/22 13:37	1
cis-1,2-Dichloroethene	1.0	U	1.0	ug/L			06/02/22 13:37	1
cis-1,3-Dichloropropene	1.0	U	1.0	ug/L			06/02/22 13:37	1
Cyclohexane	1.0	Ü	1.0	ug/L			06/02/22 13:37	1
Chlorodibromomethane	1.0		1.0	ug/L			06/02/22 13:37	1
Dichlorodifluoromethane	1.0		1.0	ug/L			06/02/22 13:37	1
Ethylbenzene	1.0		1.0	ug/L			06/02/22 13:37	1
Isopropylbenzene	1.0		1.0	ug/L			06/02/22 13:37	1
Methyl acetate	10		10	ug/L			06/02/22 13:37	1
Methyl tert-butyl ether	1.0		1.0	ug/L			06/02/22 13:37	· 1
Methylcyclohexane	1.0		1.0	ug/L			06/02/22 13:37	1
Methylene Chloride	5.0		5.0	ug/L			06/02/22 13:37	1
Styrene	1.0		1.0	ug/L			06/02/22 13:37	
•				-			06/02/22 13:37	1
Tetrachloroethene	1.0		1.0	ug/L				1
Toluene	1.0		1.0	ug/L			06/02/22 13:37	ا
trans-1,2-Dichloroethene	1.0		1.0	ug/L			06/02/22 13:37	1
trans-1,3-Dichloropropene	1.0		1.0	ug/L			06/02/22 13:37	1
Trichloroethene	1.0		1.0	ug/L			06/02/22 13:37	
Trichlorofluoromethane	1.0		1.0	ug/L			06/02/22 13:37	1
Vinyl chloride	1.0		1.0	ug/L			06/02/22 13:37	1
Xylenes, Total	2.0	U	2.0	ug/L			06/02/22 13:37	1

Eurofins Canton

6/7/2022

Page 68 of 83

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Job ID: 240-167051-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 240-528938/7

Matrix: Water

Analysis Batch: 528938

Client Sample ID: Method Blank

Prep Type: Total/NA

	IVIB IVIB				
Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	104	78 - 122		06/02/22 13:37	1
Dibromofluoromethane (Surr)	105	73 - 120		06/02/22 13:37	1
4-Bromofluorobenzene (Surr)	95	56 - 136		06/02/22 13:37	1
1,2-Dichloroethane-d4 (Surr)	96	62 - 137		06/02/22 13:37	1

Lab Sample ID: LCS 240-528938/5

Matrix: Water

Analysis Batch: 528938

Client Sample	ID: Lab Control Sample
	Dron Types Total/NA

	Prep Type: Total/NA	
cs	%Rec	

Analyte Added Result Qualifier Unit D %Rec Limits 1,1,1-Trichloroethane 25.0 24.3 ug/L 197 64.131 1,1,2-Trichloroethane 25.0 28.1 ug/L 193 51.146 1,1,2-Trichloroethane 25.0 27.2 ug/L 199 70.138 1,1-Dichloroethane 25.0 24.7 ug/L 199 72.127 1,1-Dichloroethane 25.0 24.7 ug/L 190 70.138 1,1-Dichloroethane 25.0 25.6 ug/L 102 63.134 1,2-A-Trichlorobenzene 25.0 28.9 ug/L 108 44.147 1,2-Dichloroproproprepare 25.0 26.3 ug/L 107 71.134 1,2-Dichlorobenzene 25.0 26.3 ug/L 105 78.120 1,2-Dichloropropane 25.0 26.5 ug/L 106 75.133 1,3-Dichlorobenzene 25.0 26.5 ug/L 107 80.120	•	Spike	LCS	LCS		%Rec	
1,1,2,2-Tetrachloroethane 25,0 28,1 ug/L 10,3 51,146 1,1,2-Tichloroethane 25,0 28,8 ug/L 10,3 51,146 1,1,2-Tichloroethane 25,0 27,2 ug/L 109 70,138 1,1-Dichloroethane 25,0 25,6 ug/L 102 63,134 1,2,4-Tichlorobenzene 25,0 27,0 ug/L 108 44,147 1,2-Dibrono-3-Chloropropane 25,0 28,9 ug/L 107 71,134 1,2-Dibrono-3-Chloropropane 25,0 28,9 ug/L 105 71,134 1,2-Dibrlorobenzene 25,0 26,3 ug/L 105 71,134 1,2-Dichloroperpane 25,0 26,3 ug/L 105 75,133 1,2-Dichloroperpane 25,0 26,5 ug/L 105 76,128 1,2-Dichloroperpane 25,0 26,5 ug/L 106 76,128 1,2-Dichloroperpane 25,0 26,5 ug/L 107 76,128 1,2-Dichloroperpane 25,0 26,5 ug/L 107 80,120	Analyte	Added	Result	Qualifier Unit	D %Rec	Limits	
1,1,2-Trichloro-1,2,2-trifluoroethane 25.0 25.8 ug/L 103 51 - 146 1,1-Trichloroethane 25.0 27.2 ug/L 199 70 - 138 1,1-Dichloroethane 25.0 24.7 ug/L 199 72 - 127 1,1-Dichloroethane 25.0 25.0 ug/L 108 44 - 147 1,2-H-Trichlorobenzene 25.0 27.0 ug/L 108 44 - 147 1,2-Dichloropropropane 25.0 28.9 ug/L 107 71 - 134 1,2-Dichlorobenzene 25.0 26.3 ug/L 105 78 - 120 1,2-Dichlorobenzene 25.0 26.3 ug/L 105 78 - 120 1,2-Dichlorobenzene 25.0 26.5 ug/L 105 78 - 133 1,3-Dichlorobenzene 25.0 26.2 ug/L 105 78 - 133 1,3-Dichlorobenzene 25.0 26.7 ug/L 107 78 - 133 1,4-Dichlorobenzene 25.0 26.7 ug/L 107 78 - 133	1,1,1-Trichloroethane	25.0	24.3	ug/L	97	64 - 131	
Ne	1,1,2,2-Tetrachloroethane	25.0	28.1	ug/L	112	58 - 157	
1,1,2-Trichloroethane 25.0 27.2 ug/L 199 70.138 1,1-Dichloroethane 25.0 24.7 ug/L 199 72.127 1,1-Dichloroethene 25.0 25.6 ug/L 102 63.134 1,2-Listrichlorobenzene 25.0 27.0 ug/L 108 44.147 1,2-Dichloropropane 25.0 28.9 ug/L 116 53.135 Ethylene Dibromide 25.0 26.9 ug/L 105 78.120 1,2-Dichlorobenzene 25.0 26.3 ug/L 105 78.120 1,2-Dichloropthane 25.0 26.5 ug/L 106 75.133 1,2-Dichloropthane 25.0 26.5 ug/L 106 75.133 1,2-Dichloropthane 25.0 26.2 ug/L 105 80.120 1,2-Dichloropthane 25.0 26.7 ug/L 106 75.133 1,3-Dichlorobenzene 25.0 26.7 ug/L 107 80.120 1,4-Dichlorobenzene 25.0 26.7 ug/L 113 54.156 2	1,1,2-Trichloro-1,2,2-trifluoroetha	25.0	25.8	ug/L	103	51 - 146	
1,1-Dichloroethane 25.0 24.7 ug/L 99 72.127 1,1-Dichloroethene 25.0 25.6 ug/L 102 63.134 1,2-Tichloroethene 25.0 27.0 ug/L 108 84.147 1,2-Dichloropopane 25.0 28.9 ug/L 116 53.135 Ethylene Dibromide 25.0 26.9 ug/L 107 71.134 1,2-Dichlorobenzene 25.0 26.3 ug/L 90 66.128 1,2-Dichloroptopane 25.0 26.5 ug/L 106 75.133 1,2-Dichloropenzene 25.0 26.5 ug/L 105 80.120 1,4-Dichlorobenzene 25.0 26.5 ug/L 105 80.120 1,4-Dichlorobenzene 25.0 26.5 ug/L 107 80.120 2-Butanone (MEK) 50.0 56.5 ug/L 113 54.156 2-Hexanone 50.0 56.9 ug/L 114 43.167 4-Methyl-2-pentanone (MIBK) 50.0 53.5 ug/L 107 46.158 Acetone <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
1,1-Dichloroethene 25.0 25.6 ug/L 102 63.134 1,2-A Trichlorobenzene 25.0 27.0 ug/L 116 84.147 1,2-Dichlorobenzene 25.0 28.9 ug/L 116 53.135 Ethylene Dibromide 25.0 26.9 ug/L 107 71.134 1,2-Dichloroethane 25.0 26.3 ug/L 90 66.128 1,2-Dichloroptopane 25.0 26.5 ug/L 106 75.133 1,3-Dichloroptopane 25.0 26.2 ug/L 105 80.120 1,4-Dichlorobenzene 25.0 26.7 ug/L 107 46.168 2-Hexanone 50.0 56.5 ug/L 107 46.168 Acetone 50.0 51.3 ug/L 107 46.168 Acetone <td< td=""><td></td><td></td><td></td><td>-</td><td></td><td></td><td></td></td<>				-			
1,2,4-Trichlorobenzene 25.0 27.0 ug/L 108 44 - 147 1,2-Dibromo-3-Chloropropane 25.0 28.9 ug/L 116 53.135 Ethylene Dibromide 25.0 26.9 ug/L 107 71.134 1,2-Dichlorobenzene 25.0 26.3 ug/L 105 78.120 1,2-Dichloropopane 25.0 26.5 ug/L 106 75.133 1,3-Dichlorobenzene 25.0 26.2 ug/L 105 80.120 1,4-Dichlorobenzene 25.0 26.7 ug/L 107 80.120 1,4-Dichlorobenzene 25.0 26.7 ug/L 107 80.120 1,4-Dichlorobenzene 25.0 26.7 ug/L 107 80.120 2-Haxanone 50.0 56.5 ug/L 113 54.156 2-Hexanone 50.0 56.5 ug/L 114 43.167 4-Methyl-2-pentanone (MIBK) 50.0 53.5 ug/L 107 46.158 Acetone 50.0 51.3 ug/L 100 69.149 Benzene <td>1,1-Dichloroethane</td> <td></td> <td></td> <td>ug/L</td> <td>99</td> <td></td> <td></td>	1,1-Dichloroethane			ug/L	99		
1,2-Dibromo-3-Chloropropane 25.0 28.9 ug/L 116 53.135 Ethylene Dibromide 25.0 26.9 ug/L 107 71.134 1,2-Dichlorobenzene 25.0 26.3 ug/L 105 78-120 1,2-Dichlorobethane 25.0 26.5 ug/L 106 75-133 1,3-Dichlorobenzene 25.0 26.2 ug/L 107 80-120 1,4-Dichlorobenzene 25.0 26.7 ug/L 107 80-120 1,4-Dichlorobenzene 25.0 26.7 ug/L 107 80-120 1,4-Dichlorobenzene 25.0 26.7 ug/L 107 80-120 2-Butanone (MEK) 50.0 56.5 ug/L 113 54-156 2-Hexanone 50.0 56.9 ug/L 107 46-158 A-detone 50.0 51.3 ug/L 107 46-158 A-detone 50.0 25.0 26.0 ug/L 104 77-123 Dichtorobromomethane <td>1,1-Dichloroethene</td> <td>25.0</td> <td>25.6</td> <td>ug/L</td> <td>102</td> <td>63 - 134</td> <td></td>	1,1-Dichloroethene	25.0	25.6	ug/L	102	63 - 134	
Ethylene Dibromide 25.0 26.9 ug/L 107 71.134 1,2-Dichlorobenzene 25.0 26.3 ug/L 105 78.120 1,2-Dichloroperbane 25.0 22.5 ug/L 106 75.133 1,3-Dichlorobenzene 25.0 26.5 ug/L 105 80.120 1,4-Dichlorobenzene 25.0 26.7 ug/L 107 80.120 2-Butanone (MEK) 50.0 56.5 ug/L 113 54.156 2-Hexanone 50.0 56.9 ug/L 114 43.167 4-Methyl-2-pentanone (MIBK) 50.0 53.5 ug/L 103 50.148 4-Methyl-2-pentanone (MIBK) 50.0 53.5 ug/L 103 50.149 4-Methyl-2-pentanone (MIBK) 50.0 53.5 ug/L 103 50.149 4-Methyl-2-pentanone (MIBK) 50.0 53.5 ug/L 103 50.149 4-Methyl-2-pentanone (MIBK) 50.0 50.8 ug/L 103 50.149	1,2,4-Trichlorobenzene		27.0	-	108	44 - 147	
1,2-Dichlorobenzene 25.0 26.3 ug/L 105 78-120 1,2-Dichloroethane 25.0 22.5 ug/L 90 66-128 1,2-Dichloropropane 25.0 26.5 ug/L 106 75-133 1,3-Dichlorobenzene 25.0 26.7 ug/L 107 80-120 1,4-Dichlorobenzene 25.0 26.7 ug/L 107 80-120 2-Butanone (MEK) 50.0 56.5 ug/L 113 54-156 2-Hexanone 50.0 56.9 ug/L 114 43.167 4-Methyl-2-pentanone (MIBK) 50.0 53.5 ug/L 107 46-158 A-ectone 50.0 53.5 ug/L 107 46-158 A-ectone 50.0 53.5 ug/L 107 46-158 Benzene 25.0 26.0 ug/L 104 77-123 Dichlorobromomethane 25.0 26.0 ug/L 100 69-126 Bromoform 25.0 26.7 ug/L 83 36-142 Carbon disulfide 25.0 <t< td=""><td>1,2-Dibromo-3-Chloropropane</td><td></td><td>28.9</td><td>_</td><td>116</td><td>53 - 135</td><td></td></t<>	1,2-Dibromo-3-Chloropropane		28.9	_	116	53 - 135	
1,2-Dichloroethane 25.0 22.5 ug/L 90 66.128 1,2-Dichloropropane 25.0 26.5 ug/L 105 75.133 1,3-Dichlorobenzene 25.0 26.2 ug/L 105 80.120 1,4-Dichlorobenzene 25.0 26.5 ug/L 107 80.120 2-Butanone (MEK) 50.0 56.5 ug/L 113 54.156 2-Hexanone 50.0 56.9 ug/L 107 46.158 4-Methyl-2-pentanone (MIBK) 50.0 53.5 ug/L 107 46.158 Acetone 50.0 51.3 ug/L 103 50.149 Benzene 25.0 26.0 ug/L 104 77.123 Dichlorobromomethane 25.0 24.9 ug/L 100 69.126 Bromoform 25.0 20.8 ug/L 133 36.142 Carbon disulfide 25.0 26.5 ug/L 103 43.140 Carbon tetrachloride 25.0 26.5 ug/L 106 80.121 Chloroethane 25.0	Ethylene Dibromide	25.0	26.9	ug/L	107	71 - 134	
1,2-Dichloropropane 25.0 26.5 ug/L 106 75.133 1,3-Dichlorobenzene 25.0 26.2 ug/L 105 80.120 1,4-Dichlorobenzene 25.0 26.7 ug/L 113 54.156 2-Butanone (MEK) 50.0 56.9 ug/L 114 43.167 2-Hexanone 50.0 56.9 ug/L 107 46.158 4-Methyl-2-pentanone (MIBK) 50.0 53.5 ug/L 103 50.149 Benzene 25.0 26.0 ug/L 104 77.123 Dichlorobromomethane 25.0 26.0 ug/L 100 69.126 Bromomethane 25.0 26.0 ug/L 100 69.126 Bromomethane 25.0 26.0 ug/L 100 69.126 Bromomethane 25.0 28.8 ug/L 103 35.149 Carbon disulfide 25.0 26.5 ug/L 103 43.140 Chlorobenzene 25.0 26.6 ug/L 106 85.137 Chlorobentene 25.0	1,2-Dichlorobenzene	25.0	26.3	ug/L	105	78 - 120	
1,3-Dichlorobenzene 25.0 26.2 ug/L 105 80 - 120 1,4-Dichlorobenzene 25.0 26.7 ug/L 107 80 - 120 2-Butanone (MEK) 50.0 56.5 ug/L 113 54 - 156 2-Hexanone 50.0 56.9 ug/L 114 43 - 167 4-Methyl-2-pentanone (MIBK) 50.0 53.5 ug/L 107 46 - 158 Acetone 50.0 51.3 ug/L 103 50 - 149 Benzene 25.0 26.0 ug/L 104 77 - 123 Dichlorobromomethane 25.0 24.9 ug/L 100 69 - 126 Bromoform 25.0 20.8 ug/L 100 69 - 126 Bromofithane 25.0 20.8 ug/L 103 35 - 129 Bromoform ethrachloride 25.0 26.5 ug/L 103 43 - 142 Carbon tetrachloride 25.0 26.5 ug/L 106 85 - 137 Chlorodethane 25.0 28.8 ug/L 115 38 - 152 Chloroform	1,2-Dichloroethane		22.5	ug/L	90	66 - 128	
1,4-Dichlorobenzene 25.0 26.7 ug/L 107 80 - 120 2-Butanone (MEK) 50.0 56.5 ug/L 113 54 - 156 2-Hexanone 50.0 56.9 ug/L 114 43 . 167 4-Methyl-2-pentanone (MIBK) 50.0 53.5 ug/L 107 46 - 158 Acetone 50.0 51.3 ug/L 103 50 - 149 Benzene 25.0 26.0 ug/L 104 77 - 123 Dichlorobromomethane 25.0 24.9 ug/L 100 69 - 126 Bromoform 25.0 30.7 ug/L 133 36 - 142 Carbon disulfide 25.0 20.8 ug/L 83 36 - 142 Carbon disulfide 25.0 25.7 ug/L 103 43 - 140 Carbon tetrachloride 25.0 26.5 ug/L 106 55 - 137 Chlorobenzene 25.0 28.8 ug/L 106 80 - 121 Chloroform 25.0 28.8 ug/L 105 47 - 143 cis-1,2-Dichloroptene	1,2-Dichloropropane	25.0	26.5	ug/L	106	75 - 133	
2-Butanone (MEK) 50.0 56.5 ug/L 113 54-156 2-Hexanone 50.0 56.9 ug/L 114 43-167 4-Methyl-2-pentanone (MIBK) 50.0 53.5 ug/L 107 46-158 Acetone 50.0 51.3 ug/L 103 50-149 Benzene 25.0 26.0 ug/L 104 77-123 Dichlorobromomethane 25.0 26.0 ug/L 100 69-126 Bromoform 25.0 30.7 ug/L 100 69-126 Bromomethane 25.0 20.8 ug/L 103 36-142 Carbon disulfide 25.0 28.7 ug/L 103 43-140 Carbon tetrachloride 25.0 26.5 ug/L 106 55-137 Chlorobenzene 25.0 26.5 ug/L 106 80-121 Chloroform 25.0 28.8 ug/L 115 38-152 Chloroformethane 25.0 26.3 ug/L 105 47-143 cis-1,3-Dichloropropene 25.0 26.7<	1,3-Dichlorobenzene	25.0	26.2	ug/L	105	80 - 120	
2-Hexanone 50.0 56.9 ug/L 114 43.167 4-Methyl-2-pentanone (MIBK) 50.0 53.5 ug/L 107 46.158 Acetone 50.0 51.3 ug/L 103 50.149 Benzene 25.0 26.0 ug/L 104 77.123 Dichlorobromomethane 25.0 24.9 ug/L 100 69.126 Bromoform 25.0 30.7 ug/L 123 57.129 Bromomethane 25.0 20.8 ug/L 83 36.142 Carbon disulfide 25.0 25.7 ug/L 103 43.140 Carbon tetrachloride 25.0 26.5 ug/L 106 55.137 Chlorobenzene 25.0 26.5 ug/L 106 80.121 Chloroform 25.0 28.8 ug/L 115 38.152 Chloroform 25.0 26.6 ug/L 105 47.143 cis-1,2-Dichloropthene 25.0 26.3 ug/L 105 47.143 cis-1,3-Dichloropropene 25.0 26.7 </td <td>1,4-Dichlorobenzene</td> <td>25.0</td> <td>26.7</td> <td>ug/L</td> <td>107</td> <td>80 - 120</td> <td></td>	1,4-Dichlorobenzene	25.0	26.7	ug/L	107	80 - 120	
4-Methyl-2-pentanone (MIBK) 50.0 53.5 ug/L 107 46-158 Acetone 50.0 51.3 ug/L 103 50-149 Benzene 25.0 26.0 ug/L 104 77-123 Dichlorobromomethane 25.0 24.9 ug/L 100 69-126 Bromoform 25.0 30.7 ug/L 123 57-129 Bromomethane 25.0 20.8 ug/L 83 36-142 Carbon disulfide 25.0 25.7 ug/L 103 43-140 Carbon tetrachloride 25.0 26.5 ug/L 106 55-137 Chlorobenzene 25.0 26.6 ug/L 106 80-121 Chloroethane 25.0 28.8 ug/L 115 38-152 Chloroform 25.0 28.6 ug/L 105 47-143 cis-1,2-Dichloroethene 25.0 26.3 ug/L 105 47-143 cis-1,3-Dichloropropene 25.0 26.7 ug/L 107 64-130 Cyclohexane 25.0 26.	2-Butanone (MEK)	50.0	56.5	ug/L	113	54 - 156	
Acetone 50.0 51.3 ug/L 103 50.149 Benzene 25.0 26.0 ug/L 104 77 - 123 Dichlorobromomethane 25.0 24.9 ug/L 100 69 - 126 Bromoform 25.0 30.7 ug/L 123 57 - 129 Bromomethane 25.0 20.8 ug/L 83 36 - 142 Carbon disulfide 25.0 25.7 ug/L 103 43 - 140 Carbon tetrachloride 25.0 26.5 ug/L 106 55 - 137 Chlorobenzene 25.0 26.6 ug/L 106 80 - 121 Chlorobethane 25.0 28.8 ug/L 115 38 - 152 Chloroform 25.0 28.8 ug/L 115 38 - 152 Chloromethane 25.0 26.3 ug/L 105 47 - 143 cis-1,2-Dichloroptopene 25.0 24.9 ug/L 100 77 - 123 cis-1,3-Dichloroptopene 25.0 26.7 ug/L 107 58 - 146 Chlorodibromomethane 25	2-Hexanone	50.0	56.9	ug/L	114	43 - 167	
Benzene 25.0 26.0 ug/L 104 77 - 123 Dichlorobromomethane 25.0 24.9 ug/L 100 69 - 126 Bromoform 25.0 30.7 ug/L 123 57 - 129 Bromomethane 25.0 20.8 ug/L 83 36 - 142 Carbon disulfide 25.0 25.7 ug/L 103 43 - 140 Carbon tetrachloride 25.0 26.5 ug/L 106 55 - 137 Chlorobenzene 25.0 26.6 ug/L 106 80 - 121 Chlorothane 25.0 28.8 ug/L 115 38 - 152 Chloroform 25.0 28.8 ug/L 115 38 - 152 Chloromethane 25.0 26.3 ug/L 105 47 - 143 cis-1,2-Dichloroethene 25.0 26.3 ug/L 100 77 - 123 cis-1,3-Dichloropropene 25.0 26.7 ug/L 107 64 - 130 Cyclohexane 25.0 26.6 ug/L 107 58 - 146 Chlorodifluoromethane <t< td=""><td>4-Methyl-2-pentanone (MIBK)</td><td>50.0</td><td>53.5</td><td>ug/L</td><td>107</td><td>46 - 158</td><td></td></t<>	4-Methyl-2-pentanone (MIBK)	50.0	53.5	ug/L	107	46 - 158	
Dichlorobromomethane 25.0 24.9 ug/L 100 69 - 126 Bromoform 25.0 30.7 ug/L 123 57 - 129 Bromomethane 25.0 20.8 ug/L 83 36 - 142 Carbon disulfide 25.0 25.7 ug/L 103 43 - 140 Carbon tetrachloride 25.0 26.5 ug/L 106 55 - 137 Chlorobenzene 25.0 26.6 ug/L 106 80 - 121 Chlorothane 25.0 28.8 ug/L 115 38 - 152 Chloroform 25.0 23.6 ug/L 95 74 - 122 Chloromethane 25.0 26.3 ug/L 105 47 - 143 cis-1,2-Dichloroethene 25.0 26.7 ug/L 107 64 - 130 Cyclohexane 25.0 26.6 ug/L 107 58 - 146 Chlorodibromomethane 25.0 27.9 ug/L 112 70 - 124 Dichlorodifluoromethane 25.0 30.8 ug/L 123 34 - 153 Ethylbenzene	Acetone	50.0	51.3	ug/L	103	50 - 149	
Bromoform 25.0 30.7 ug/L 123 57 - 129 Bromomethane 25.0 20.8 ug/L 83 36 - 142 Carbon disulfide 25.0 25.7 ug/L 103 43 - 140 Carbon tetrachloride 25.0 26.5 ug/L 106 55 - 137 Chlorobenzene 25.0 26.6 ug/L 106 80 - 121 Chloroethane 25.0 28.8 ug/L 115 38 - 152 Chloroform 25.0 23.6 ug/L 95 74 - 122 Chloromethane 25.0 26.3 ug/L 105 47 - 143 cis-1,2-Dichloroethene 25.0 24.9 ug/L 100 77 - 123 cis-1,3-Dichloropropene 25.0 26.7 ug/L 107 64 - 130 Cyclohexane 25.0 26.6 ug/L 107 58 - 146 Chlorodifluoromethane 25.0 30.8 ug/L 112 70 - 124 Dichlorodifluoromethane 25.0 30.8 ug/L 107 80 - 121	Benzene	25.0	26.0	ug/L	104	77 - 123	
Bromomethane 25.0 20.8 ug/L 83 36 - 142 Carbon disulfide 25.0 25.7 ug/L 103 43 - 140 Carbon tetrachloride 25.0 26.5 ug/L 106 55 - 137 Chlorobenzene 25.0 26.6 ug/L 106 80 - 121 Chloroethane 25.0 28.8 ug/L 115 38 - 152 Chloroform 25.0 23.6 ug/L 95 74 - 122 Chloromethane 25.0 26.3 ug/L 105 47 - 143 cis-1,2-Dichloroethene 25.0 24.9 ug/L 100 77 - 123 cis-1,3-Dichloropropene 25.0 26.7 ug/L 107 64 - 130 Cyclohexane 25.0 26.6 ug/L 107 58 - 146 Chlorodifluoromethane 25.0 27.9 ug/L 112 70 - 124 Dichlorodifluoromethane 25.0 30.8 ug/L 123 34 - 153 Ethylbenzene 25.0 26.7 ug/L 107 80 - 121	Dichlorobromomethane	25.0	24.9	ug/L	100	69 - 126	
Carbon disulfide 25.0 25.7 ug/L 103 43 - 140 Carbon tetrachloride 25.0 26.5 ug/L 106 55 - 137 Chlorobenzene 25.0 26.6 ug/L 106 80 - 121 Chloroethane 25.0 28.8 ug/L 115 38 - 152 Chloroform 25.0 23.6 ug/L 95 74 - 122 Chloromethane 25.0 26.3 ug/L 105 47 - 143 cis-1,2-Dichloroethene 25.0 24.9 ug/L 100 77 - 123 cis-1,3-Dichloropropene 25.0 26.7 ug/L 107 64 - 130 Cyclohexane 25.0 26.6 ug/L 107 58 - 146 Chlorodibromomethane 25.0 27.9 ug/L 112 70 - 124 Dichlorodifluoromethane 25.0 30.8 ug/L 123 34 - 153 Ethylbenzene 25.0 26.7 ug/L 107 80 - 121	Bromoform	25.0	30.7	ug/L	123	57 - 129	
Carbon tetrachloride 25.0 26.5 ug/L 106 55 - 137 Chlorobenzene 25.0 26.6 ug/L 106 80 - 121 Chloroethane 25.0 28.8 ug/L 115 38 - 152 Chloroform 25.0 23.6 ug/L 95 74 - 122 Chloromethane 25.0 26.3 ug/L 105 47 - 143 cis-1,2-Dichloroethene 25.0 24.9 ug/L 100 77 - 123 cis-1,3-Dichloropropene 25.0 26.7 ug/L 107 64 - 130 Cyclohexane 25.0 26.6 ug/L 107 58 - 146 Chlorodibromomethane 25.0 27.9 ug/L 112 70 - 124 Dichlorodifluoromethane 25.0 30.8 ug/L 123 34 - 153 Ethylbenzene 25.0 26.7 ug/L 107 80 - 121	Bromomethane	25.0	20.8	ug/L	83	36 - 142	
Chlorobenzene 25.0 26.6 ug/L 106 80 - 121 Chloroethane 25.0 28.8 ug/L 115 38 - 152 Chloroform 25.0 23.6 ug/L 95 74 - 122 Chloromethane 25.0 26.3 ug/L 105 47 - 143 cis-1,2-Dichloroethene 25.0 24.9 ug/L 100 77 - 123 cis-1,3-Dichloropropene 25.0 26.7 ug/L 107 64 - 130 Cyclohexane 25.0 26.6 ug/L 107 58 - 146 Chlorodibromomethane 25.0 27.9 ug/L 112 70 - 124 Dichlorodifluoromethane 25.0 30.8 ug/L 123 34 - 153 Ethylbenzene 25.0 26.7 ug/L 107 80 - 121	Carbon disulfide	25.0	25.7	ug/L	103	43 - 140	
Chloroethane 25.0 28.8 ug/L 115 38 - 152 Chloroform 25.0 23.6 ug/L 95 74 - 122 Chloromethane 25.0 26.3 ug/L 105 47 - 143 cis-1,2-Dichloroethene 25.0 24.9 ug/L 100 77 - 123 cis-1,3-Dichloropropene 25.0 26.7 ug/L 107 64 - 130 Cyclohexane 25.0 26.6 ug/L 107 58 - 146 Chlorodibromomethane 25.0 27.9 ug/L 112 70 - 124 Dichlorodifluoromethane 25.0 30.8 ug/L 123 34 - 153 Ethylbenzene 25.0 26.7 ug/L 107 80 - 121	Carbon tetrachloride	25.0	26.5	ug/L	106	55 - 137	
Chloroform 25.0 23.6 ug/L 95 74 - 122 Chloromethane 25.0 26.3 ug/L 105 47 - 143 cis-1,2-Dichloroethene 25.0 24.9 ug/L 100 77 - 123 cis-1,3-Dichloropropene 25.0 26.7 ug/L 107 64 - 130 Cyclohexane 25.0 26.6 ug/L 107 58 - 146 Chlorodibromomethane 25.0 27.9 ug/L 112 70 - 124 Dichlorodifluoromethane 25.0 30.8 ug/L 123 34 - 153 Ethylbenzene 25.0 26.7 ug/L 107 80 - 121	Chlorobenzene	25.0	26.6	ug/L	106	80 - 121	
Chloromethane 25.0 26.3 ug/L 105 47 - 143 cis-1,2-Dichloroethene 25.0 24.9 ug/L 100 77 - 123 cis-1,3-Dichloropropene 25.0 26.7 ug/L 107 64 - 130 Cyclohexane 25.0 26.6 ug/L 107 58 - 146 Chlorodibromomethane 25.0 27.9 ug/L 112 70 - 124 Dichlorodifluoromethane 25.0 30.8 ug/L 123 34 - 153 Ethylbenzene 25.0 26.7 ug/L 107 80 - 121	Chloroethane	25.0	28.8	ug/L	115	38 - 152	
cis-1,2-Dichloroethene 25.0 24.9 ug/L 100 77 - 123 cis-1,3-Dichloropropene 25.0 26.7 ug/L 107 64 - 130 Cyclohexane 25.0 26.6 ug/L 107 58 - 146 Chlorodibromomethane 25.0 27.9 ug/L 112 70 - 124 Dichlorodifluoromethane 25.0 30.8 ug/L 123 34 - 153 Ethylbenzene 25.0 26.7 ug/L 107 80 - 121	Chloroform	25.0	23.6	ug/L	95	74 - 122	
cis-1,3-Dichloropropene 25.0 26.7 ug/L 107 64 - 130 Cyclohexane 25.0 26.6 ug/L 107 58 - 146 Chlorodibromomethane 25.0 27.9 ug/L 112 70 - 124 Dichlorodifluoromethane 25.0 30.8 ug/L 123 34 - 153 Ethylbenzene 25.0 26.7 ug/L 107 80 - 121	Chloromethane	25.0	26.3	ug/L	105	47 - 143	
Cyclohexane 25.0 26.6 ug/L 107 58 - 146 Chlorodibromomethane 25.0 27.9 ug/L 112 70 - 124 Dichlorodifluoromethane 25.0 30.8 ug/L 123 34 - 153 Ethylbenzene 25.0 26.7 ug/L 107 80 - 121	cis-1,2-Dichloroethene	25.0	24.9	ug/L	100	77 - 123	
Cyclohexane 25.0 26.6 ug/L 107 58 - 146 Chlorodibromomethane 25.0 27.9 ug/L 112 70 - 124 Dichlorodifluoromethane 25.0 30.8 ug/L 123 34 - 153 Ethylbenzene 25.0 26.7 ug/L 107 80 - 121	cis-1,3-Dichloropropene	25.0	26.7	ug/L	107	64 - 130	
Chlorodibromomethane 25.0 27.9 ug/L 112 70 - 124 Dichlorodifluoromethane 25.0 30.8 ug/L 123 34 - 153 Ethylbenzene 25.0 26.7 ug/L 107 80 - 121		25.0	26.6		107	58 - 146	
Dichlorodifluoromethane 25.0 30.8 ug/L 123 34 - 153 Ethylbenzene 25.0 26.7 ug/L 107 80 - 121	Chlorodibromomethane	25.0	27.9	_	112	70 - 124	
Ethylbenzene 25.0 26.7 ug/L 107 80 - 121	Dichlorodifluoromethane	25.0	30.8	_	123	34 - 153	
·	Ethylbenzene	25.0	26.7		107	80 - 121	
• • • •	Isopropylbenzene		26.1	_	104	74 - 128	
Methyl acetate 50.0 53.4 ug/L 107 42 - 169		50.0	53.4	•	107		
Methyl tert-butyl ether 25.0 25.1 ug/L 100 65 - 126			25.1		100	65 - 126	
Methylcyclohexane 25.0 27.9 ug/L 112 62 - 136					112		

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6/7/2022

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Job ID: 240-167051-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 240-528938/5

Matrix: Water

Analysis Batch: 528938

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Methylene Chloride	25.0	24.8		ug/L		99	71 - 125	
Styrene	25.0	25.7		ug/L		103	80 - 135	
Tetrachloroethene	25.0	27.8		ug/L		111	76 - 123	
Toluene	25.0	26.2		ug/L		105	80 - 123	
trans-1,2-Dichloroethene	25.0	24.7		ug/L		99	75 - 124	
trans-1,3-Dichloropropene	25.0	28.2		ug/L		113	57 - 129	
Trichloroethene	25.0	26.0		ug/L		104	70 - 122	
Trichlorofluoromethane	25.0	23.4		ug/L		94	30 - 170	
Vinyl chloride	25.0	25.3		ug/L		101	60 - 144	
Xylenes, Total	50.0	50.6		ug/L		101	80 - 121	
m-Xylene & p-Xylene	25.0	25.4		ug/L		102	80 - 120	
o-Xylene	25.0	25.2		ug/L		101	80 - 123	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
Toluene-d8 (Surr)	110		78 - 122
Dibromofluoromethane (Surr)	102		73 - 120
4-Bromofluorobenzene (Surr)	103		56 - 136
1,2-Dichloroethane-d4 (Surr)	94		62 - 137

Client Sample ID: Method Blank

Prep Type: Total/NA

Lab Sample ID: MB 240-529073/8

Analysis Batch: 529073

Matrix: Water

MB MB

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	ug/L			06/03/22 12:15	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	ug/L			06/03/22 12:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	ug/L			06/03/22 12:15	1
1,1,2-Trichloroethane	1.0	U	1.0	ug/L			06/03/22 12:15	1
1,1-Dichloroethane	1.0	U	1.0	ug/L			06/03/22 12:15	1
1,1-Dichloroethene	1.0	U	1.0	ug/L			06/03/22 12:15	1
1,2,4-Trichlorobenzene	1.0	U	1.0	ug/L			06/03/22 12:15	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	ug/L			06/03/22 12:15	1
Ethylene Dibromide	1.0	U	1.0	ug/L			06/03/22 12:15	1
1,2-Dichlorobenzene	1.0	U	1.0	ug/L			06/03/22 12:15	1
1,2-Dichloroethane	1.0	U	1.0	ug/L			06/03/22 12:15	1
1,2-Dichloropropane	1.0	U	1.0	ug/L			06/03/22 12:15	1
1,3-Dichlorobenzene	1.0	U	1.0	ug/L			06/03/22 12:15	1
1,4-Dichlorobenzene	1.0	U	1.0	ug/L			06/03/22 12:15	1
2-Butanone (MEK)	10	U	10	ug/L			06/03/22 12:15	1
2-Hexanone	10	U	10	ug/L			06/03/22 12:15	1
4-Methyl-2-pentanone (MIBK)	10	U	10	ug/L			06/03/22 12:15	1
Acetone	10	U	10	ug/L			06/03/22 12:15	1
Benzene	1.0	U	1.0	ug/L			06/03/22 12:15	1
Dichlorobromomethane	1.0	U	1.0	ug/L			06/03/22 12:15	1
Bromoform	1.0	U	1.0	ug/L			06/03/22 12:15	1
Bromomethane	1.0	U	1.0	ug/L			06/03/22 12:15	1
Carbon disulfide	1.0	U	1.0	ug/L			06/03/22 12:15	1
Carbon tetrachloride	1.0	U	1.0	ug/L			06/03/22 12:15	1

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Job ID: 240-167051-1

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 240-529073/8

Matrix: Water

Analysis Batch: 529073

Client Sample ID: Method Blank Prep Type: Total/NA

MB MB Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac Chlorobenzene 1.0 IJ 1.0 ug/L 06/03/22 12:15 Chloroethane 1.0 1.0 ug/L 06/03/22 12:15 Chloroform 06/03/22 12:15 1.0 U 1.0 ug/L Chloromethane 1.0 U 1.0 ug/L 06/03/22 12:15 cis-1,2-Dichloroethene 1.0 U 1.0 ug/L 06/03/22 12:15 cis-1,3-Dichloropropene 1.0 U 1.0 ug/L 06/03/22 12:15 Cyclohexane 1.0 U 1.0 ug/L 06/03/22 12:15 ug/L Chlorodibromomethane 1.0 U 1.0 06/03/22 12:15 Dichlorodifluoromethane 1.0 U 1.0 ug/L 06/03/22 12:15 Ethylbenzene 1.0 U ug/L 06/03/22 12:15 1.0 ug/L 06/03/22 12:15 Isopropylbenzene 1.0 U 1.0 06/03/22 12:15 Methyl acetate 10 U 10 ug/L Methyl tert-butyl ether 1.0 U 1.0 ug/L 06/03/22 12:15 Methylcyclohexane 1.0 U 1.0 ug/L 06/03/22 12:15 Methylene Chloride 5.0 U 5.0 ug/L 06/03/22 12:15 1.0 U 1.0 Styrene ug/L 06/03/22 12:15 Tetrachloroethene 1.0 U 1.0 ug/L 06/03/22 12:15 Toluene 1.0 U 1.0 ug/L 06/03/22 12:15 trans-1,2-Dichloroethene 1.0 U 1.0 ug/L 06/03/22 12:15 trans-1,3-Dichloropropene 1.0 U 1.0 ug/L 06/03/22 12:15 Trichloroethene 1.0 U 1.0 ug/L 06/03/22 12:15 Trichlorofluoromethane 1.0 U 1.0 ug/L 06/03/22 12:15 Vinyl chloride 1.0 U 1.0 ug/L 06/03/22 12:15

MB MB

2.0 U

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	89		78 - 122		06/03/22 12:15	1
Dibromofluoromethane (Surr)	102		73 - 120		06/03/22 12:15	1
4-Bromofluorobenzene (Surr)	92		56 - 136		06/03/22 12:15	1
1,2-Dichloroethane-d4 (Surr)	98		62 - 137		06/03/22 12:15	1

2.0

ug/L

Lab Sample ID: LCS 240-529073/5

Matrix: Water

Xylenes, Total

Analysis Batch: 529073

Client Sample ID: Lab Control Sample Prep Type: Total/NA

06/03/22 12:15

-	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,1,1-Trichloroethane	20.0	20.0		ug/L		100	64 - 131	
1,1,2,2-Tetrachloroethane	20.0	19.3		ug/L		96	58 - 157	
1,1,2-Trichloro-1,2,2-trifluoroetha	20.0	20.9		ug/L		104	51 - 146	
ne								
1,1,2-Trichloroethane	20.0	18.5		ug/L		92	70 - 138	
1,1-Dichloroethane	20.0	19.9		ug/L		99	72 - 127	
1,1-Dichloroethene	20.0	20.7		ug/L		103	63 - 134	
1,2,4-Trichlorobenzene	20.0	15.0		ug/L		75	44 - 147	
1,2-Dibromo-3-Chloropropane	20.0	15.6		ug/L		78	53 - 135	
Ethylene Dibromide	20.0	17.9		ug/L		90	71 - 134	
1,2-Dichlorobenzene	20.0	17.5		ug/L		88	78 - 120	
1,2-Dichloroethane	20.0	20.6		ug/L		103	66 - 128	
1,2-Dichloropropane	20.0	19.9		ug/L		100	75 - 133	

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Eurofins Canton

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Job ID: 240-167051-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 240-529073/5

Matrix: Water

Carbon tetrachloride

Chlorobenzene

Chloromethane

Cyclohexane

Ethylbenzene

Methyl acetate

Styrene

Toluene

Isopropylbenzene

Methyl tert-butyl ether

Methylcyclohexane

Methylene Chloride

Tetrachloroethene

Trichloroethene

Vinyl chloride

Xylenes, Total

o-Xylene

trans-1.2-Dichloroethene

trans-1,3-Dichloropropene

Trichlorofluoromethane

m-Xylene & p-Xylene

cis-1,2-Dichloroethene

cis-1,3-Dichloropropene

Chlorodibromomethane

Dichlorodifluoromethane

Chloroethane

Chloroform

Analysis Batch: 529073

Client Sample ID: Lab Control Sample

95

91

110

103

100

103

95

91

82

115

89

80

96

98

81

98

88

88

89

98

88

101

112

106

86

86

87

%Rec

55 - 137

80 - 121

38 - 152

74 - 122

47 - 143

77 - 123

64 - 130

58 - 146

70 - 124

34 - 153

80 - 121 74 - 128

42 - 169

65 - 126

62 - 136

71 - 125

80 - 135

76 - 123

80 - 123

75 - 124

57 - 129

70 - 122

30 - 170

60 - 144

80 - 121

80 - 120

80 - 123

Prep Type: Total/NA

Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,3-Dichlorobenzene	20.0	17.4		ug/L		87	80 - 120	
1,4-Dichlorobenzene	20.0	17.7		ug/L		88	80 - 120	
2-Butanone (MEK)	40.0	38.3		ug/L		96	54 - 156	
2-Hexanone	40.0	35.9		ug/L		90	43 - 167	
4-Methyl-2-pentanone (MIBK)	40.0	37.8		ug/L		95	46 - 158	
Acetone	40.0	39.8		ug/L		99	50 - 149	
Benzene	20.0	20.5		ug/L		102	77 - 123	
Dichlorobromomethane	20.0	19.8		ug/L		99	69 - 126	
Bromoform	20.0	14.5		ug/L		72	57 - 129	
Bromomethane	20.0	16.3		ug/L		82	36 - 142	
Carbon disulfide	20.0	20.4		ug/L		102	43 - 140	

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

40.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

40.0

20.0

20.0

Spike

LCS LCS

19.0

18.2

22.0

20.6

20.1

20.5

19.0

18.2

16.3

23.1

17.8

16.0

38.2

19.7

16.3

19.6

17.6

17.7

17.8

19.7

17.6

20.2

22.3

21.2

34.5

17.1

17.4

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

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ug/L

ug/L

ug/L

ug/L

ug/L

ı	CS	LCS

Surrogate	%Recovery	Qualifier	Limits
Toluene-d8 (Surr)	93		78 - 122
Dibromofluoromethane (Surr)	102		73 - 120
4-Bromofluorobenzene (Surr)	96		56 - 136
1,2-Dichloroethane-d4 (Surr)	96		62 - 137

QC Association Summary

Client: ZF Active Safety and Electronics LLC Job ID: 240-167051-1

Project/Site: Milford

GC/MS VOA

Analysis Batch: 528483

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-167051-2	OW-10D_051722	Total/NA	Water	8260D	
240-167051-3	OW-08D_051722	Total/NA	Water	8260D	
240-167051-4	OW-05D2_051722	Total/NA	Water	8260D	
240-167051-5	OW-30_051722	Total/NA	Water	8260D	
240-167051-6	OW-23D_051722	Total/NA	Water	8260D	
240-167051-7	OW-28_051722	Total/NA	Water	8260D	
240-167051-8	OW-18D_051822	Total/NA	Water	8260D	
240-167051-9	OW-09-ML-D_051822	Total/NA	Water	8260D	
240-167051-10	OW-09-ML-C_051822	Total/NA	Water	8260D	
240-167051-11	OW-18-ML-A_051822	Total/NA	Water	8260D	
240-167051-12	OW-18-ML-B_051822	Total/NA	Water	8260D	
240-167051-13	OW-18-ML-C_051922	Total/NA	Water	8260D	
MB 240-528483/8	Method Blank	Total/NA	Water	8260D	
LCS 240-528483/5	Lab Control Sample	Total/NA	Water	8260D	
240-167051-2 MS	OW-10D_051722	Total/NA	Water	8260D	
240-167051-2 MSD	OW-10D_051722	Total/NA	Water	8260D	

Analysis Batch: 528486

Lab Sample ID 240-167051-1	Client Sample ID OW-16D2_051822	Prep Type Total/NA	Matrix Water	Method 8260D	Prep Batch
240-167051-14	OW-18-ML-D_051922	Total/NA	Water	8260D	
MB 240-528486/8	Method Blank	Total/NA	Water	8260D	
LCS 240-528486/5	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 528862

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-167051-22	EQUIPMENT BLANK_051922	Total/NA	Water	8260D	
240-167051-23	FIELD BLANK_051922	Total/NA	Water	8260D	
240-167051-24	TRIP BLANK_051922	Total/NA	Water	8260D	
MB 240-528862/8	Method Blank	Total/NA	Water	8260D	
LCS 240-528862/5	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 528938

Lab Sample ID 240-167051-15	OW-18-ML-E_051922	Prep Type Total/NA	Matrix Water	Method 8260D	Prep Batch
240-167051-16	OW-18-ML-F_051922	Total/NA	Water	8260D	
240-167051-17	OW-02D2_051922	Total/NA	Water	8260D	
MB 240-528938/7	Method Blank	Total/NA	Water	8260D	
LCS 240-528938/5	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 529073

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-167051-18	OW-22_052022	Total/NA	Water	8260D	
240-167051-19	OW-07D_052022	Total/NA	Water	8260D	
240-167051-20	DUP-01_052022	Total/NA	Water	8260D	
240-167051-21	DUP-02_052022	Total/NA	Water	8260D	
MB 240-529073/8	Method Blank	Total/NA	Water	8260D	
LCS 240-529073/5	Lab Control Sample	Total/NA	Water	8260D	

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Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Client Sample ID: OW-16D2 051822

Date Collected: 05/18/22 09:18 Date Received: 05/21/22 08:00

Lab Sample ID: 240-167051-1

Matrix: Water

	Batch Bat		Dilution			Prepared	
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analys
Total/NA	Analysis	8260D		1	528486	05/31/22 19:52	TJL1

Client Sample ID: OW-10D 051722

Date Collected: 05/17/22 09:42 Date Received: 05/21/22 08:00

Lab Sample ID: 240-167051-2

Lab TAL CAN

Matrix: Water

	Batch	Batch	Dilution		Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	528483	05/31/22 14:14	HMB	TAL CAN

Client Sample ID: OW-08D_051722

Date Collected: 05/17/22 11:45 Date Received: 05/21/22 08:00 Lab Sample ID: 240-167051-3

Matrix: Water

		Batch	Batch		Dilution		Prepared		
	Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
l	Total/NA	Analysis	8260D		1	528483	05/31/22 15:28	HMB	TAL CAN

Client Sample ID: OW-05D2 051722

Date Collected: 05/17/22 13:15

Date Received: 05/21/22 08:00

Lab Sample ID: 240-167051-4

Lab Sample ID: 240-167051-5

Lab Sample ID: 240-167051-6

Matrix: Water

Matrix: Water

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared				
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab		
Total/NA	Analysis	8260D			528483	05/31/22 15:52	HMB	TAL CAN		

Client Sample ID: OW-30 051722

Date Collected: 05/17/22 14:35

Date Received:	Pate Received: 05/21/22 08:00										
	Batch	Batch		Dilution	Batch	Prepared					
Pren Tyne	Type	Method	Run	Factor	Number	or Analyzed	Analyst	l ah			

Prep Type Type or Analyzed TAL CAN Total/NA Analysis 528483 05/31/22 16:17 HMB

Client Sample ID: OW-23D 051722

Date Collected: 05/17/22 15:56

Date Received: 05/21/22 08:00

		Batch	Batch		Dilution	Batch	Prepared		
Pr	ер Туре	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
To	tal/NA	Analysis	8260D			528483	05/31/22 16:42	HMB	TAL CAN

Date Received: 05/21/22 08:00

Client Sample ID: OW-28_051722	Lab Sample ID: 240-167051-7
Date Collected: 05/17/22 17:05	Matrix: Water
Data Pacaiyad: 05/21/22 08:00	

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	528483	05/31/22 17:06	HMB	TAL CAN

Project/Site: Milford

Client Sample ID: OW-18D_051822

Date Collected: 05/18/22 11:10 Date Received: 05/21/22 08:00 Lab Sample ID: 240-167051-8

Matrix: Water

Matrix: Water

Batch Batch Dilution Batch Prepared
Prep Type Type Method Run Factor Number or Analyzed

 Prep Type
 Type
 Method
 Run
 Factor
 Number
 or Analyzed
 Analyst
 Lab

 Total/NA
 Analysis
 8260D
 1
 528483
 05/31/22 17:31
 HMB
 TAL CAN

Date Collected: 05/18/22 12:10 Date Received: 05/21/22 08:00

Batch Batch Dilution Batch Prepared
Prep Type Type Method Run Factor Number or Analyzed Analyst Lab

Total/NA Analysis 8260D 1 528483 05/31/22 17:55 HMB TAL CAN

Date Collected: 05/18/22 13:13 Matrix: Water

Date Received: 05/21/22 08:00

Batch Batch Dilution Batch Prepared **Prep Type** Method **Factor** Number or Analyzed Type Run Analyst Lab Total/NA Analysis 8260D 528483 05/31/22 18:20 HMB TAL CAN

Client Sample ID: OW-18-ML-A 051822 Lab Sample ID: 240-167051-11

Date Collected: 05/18/22 14:55 East Sample 15: 245 167651 17

Date Received: 05/21/22 08:00

Batch Batch Dilution Batch Prepared **Prep Type** Method Run Factor Number or Analyzed Analyst Type Lab Analysis 8260D 528483 05/31/22 18:45 HMB TAL CAN Total/NA

Date Collected: 05/18/22 15:33 Matrix: Water

Date Received: 05/21/22 08:00

Batch Batch Dilution Batch Prepared Method Number or Analyzed **Prep Type** Type Run Factor Analyst Lab TAL CAN Total/NA Analysis 8260D 528483 05/31/22 19:09 HMB

Date Collected: 05/19/22 09:46 Matrix: Water

Date Received: 05/21/22 08:00

Dilution Batch **Prepared** Batch Batch **Prep Type** Type Method Run **Factor** Number or Analyzed Analyst Lab 05/31/22 19:34 НМВ TAL CAN Total/NA Analysis 8260D 528483

Date Collected: 05/19/22 10:55 Date Received: 05/21/22 08:00

Batch Batch Dilution Batch **Prepared** Method Prep Type Type Run **Factor** Number or Analyzed Analyst Lab TAL CAN Total/NA Analysis 8260D 528486 05/31/22 20:14 TJL1

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Matrix: Water

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Client Sample ID: OW-18-ML-E_051922

Date Collected: 05/19/22 12:46 Date Received: 05/21/22 08:00 Lab Sample ID: 240-167051-15

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	528938	06/02/22 16:23	TJL1	TAL CAN

Client Sample ID: OW-18-ML-F_051922

Date Collected: 05/19/22 13:52 Date Received: 05/21/22 08:00 Lab Sample ID: 240-167051-16

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	528938	06/02/22 16:47	TJL1	TAL CAN

Client Sample ID: OW-02D2_051922

Date Collected: 05/19/22 16:03 Date Received: 05/21/22 08:00 Lab Sample ID: 240-167051-17

Matrix: Water

		Batch	Batch		Dilution	Batch	Prepared		
	Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
l	Total/NA	Analysis	8260D		2.5	528938	06/02/22 17:10	TJL1	TAL CAN

Client Sample ID: OW-22_052022

Date Collected: 05/20/22 08:47

Date Received: 05/21/22 08:00

Lab	Sampl	e ID:	240-1	67	051-1	8

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		2.5	529073	06/03/22 17:59	HMB	TAL CAN

Client Sample ID: OW-07D_052022

Date Collected: 05/20/22 10:25

Date Received: 05/21/22 08:00

Lab Sample ID:	240-167051-19
	Barrier Abreton

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	529073	06/03/22 18:23	HMB	TAL CAN

Client Sample ID: DUP-01_052022

Date Collected: 05/20/22 00:00

Date Received: 05/21/22 08:00

Lab Sampl	e ID: 240-1	67051-20
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Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	529073	06/03/22 18:48	HMB	TAL CAN

Client Sample ID: DUP-02_052022

Date Collected: 05/20/22 00:00

Date Received: 05/21/22 08:00

ab Sample ID: 240-167051-2 ^a	1
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Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	529073	06/03/22 19:12	HMB	TAL CAN

Lab Chronicle

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Client Sample ID: EQUIPMENT BLANK_051922

Lab Sample ID: 240-167051-22 Date Collected: 05/19/22 10:00

Matrix: Water

Job ID: 240-167051-1

Date Received: 05/21/22 08:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	528862	06/02/22 19:45	HMB	TAL CAN

Client Sample ID: FIELD BLANK_051922

Lab Sample ID: 240-167051-23 Date Collected: 05/19/22 09:20 **Matrix: Water**

Date Received: 05/21/22 08:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	528862	06/02/22 20:10	HMB	TAL CAN

Client Sample ID: TRIP BLANK_051922

Lab Sample ID: 240-167051-24

Date Collected: 05/19/22 00:00 **Matrix: Water**

Date Received: 05/21/22 08:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D			528862	06/02/22 20:35	HMB	TAL CAN

Laboratory References:

TAL CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: ZF Active Safety and Electronics LLC

Project/Site: Milford

Job ID: 240-167051-1

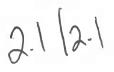
Laboratory: Eurofins Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-27-23
Connecticut	State	PH-0590	12-31-23
Florida	NELAP	E87225	06-30-22
Georgia	State	4062	02-23-22 *
Illinois	NELAP	200004	07-31-22
Iowa	State	421	06-01-23
Kentucky (UST)	State	112225	02-27-23
Kentucky (WW)	State	KY98016	12-31-22
Minnesota	NELAP	039-999-348	12-31-22
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-22
New York	NELAP	10975	04-01-23
Ohio	State	8303	02-23-23
Ohio VAP	State	CL0024	02-27-23
Oregon	NELAP	4062	02-27-23
Pennsylvania	NELAP	68-00340	08-31-22
Texas	NELAP	T104704517-22-16	08-31-22
Virginia	NELAP	11570	09-14-22
Washington	State	C971	01-12-23
West Virginia DEP	State	210	12-31-22

 $^{^{\}star} \ \text{Accreditation/Certification renewal pending - accreditation/certification considered valid}.$

Eurofins Canton



Privileged & Confidential Yes Site Name: Milford Project Type: Groundwater Sampling - IZ TRW PO No. 30046739.0001Z RW PM (name, company, address, e-mail) Database Manager; (name, company, address, E-mail) Ob Bleazard But ma Sample and Sharon Clouse 20: East Germann Road Acsa, AZ, 8521.2 Ob Moral Sample Sample Sample Identification and Information Name Sample Sample Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of East Sample No. of E	North Canton				4-1	235 4													LAB USE ON	d.Y
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2 OW-08D			OW-08D_051722	51722	1145	GW	WATER	REG	3	G	X						
3 OW-05D2			OW-05D2 051722			GW	WATER	REG	- 3	G	X						
4 OW-30		-		05.17.22		GW	WATER	REG	3	G	N						
5 OW-23D				51722		GW	WATER	REG	3	G	X						
6 OW-28			OW-28_051722	5.17.22	1705	GW	WATER	REG	3	G	X						
7 OW-18D		Section		5.18.22	1110	GW	WATER	REG	3	G	X						
8 OW-09-ML-D			OW-09-ML-D : 51 22	-		GW	WATER	REG	3	G	1						
9 OW-09-ML-C			OW-09-ML-C 151821			GW	WATER	REG	3	G	X						
10 OW-18-ML-A			OW-18-ML-A_05/822			GW	WATER	REG	3	G	N						
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WI-NC-099



Wednesday, April 06, 2022

Fibertec Project Number:

A07755

Project Identification:

TRW Milford ZF Active Safety (30046730) /30046730

Submittal Date:

04/04/2022

Mrs. Marina Samp Arcadis U.S., Inc. - Novi 28550 Cabot Drive Suite 500 Novi, MI 48377

Dear Mrs. Samp,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

By Sue Ricketts at 12:26 PM, Apr 06, 2022

For Daryl P. Strandbergh Laboratory Director

Enclosures

RSN: A07755-220406122339



Order: A07755
Page: 2 of 10
Date: 04/06/22

11:45

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: FIELDBLANK_040422 Chain of Custody: 201041

Client Project Name: TRW Milford ZF Active Safety Sample No: Collect Date: 04/04/22

(30046730)

Client Project No: 30046730 Sample Matrix: Blank: Field Collect Time:

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable #: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC Method: EPA 5030C/EPA 8260D	/MS			•	uot ID: cription:	A07755-001 FIELDBLANK_04		Blank: Field		
						Prepar	ation	An	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U		μg/L	50	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
3. Benzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
4. Bromobenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
5. Bromochloromethane	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
6. Bromodichloromethane	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
7. Bromoform	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
8. Bromomethane	U	V- L-	μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
9.2-Butanone	U		μg/L	25	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
10. n-Butylbenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
11. sec-Butylbenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
12. tert-Butylbenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
13. Carbon Disulfide	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
15. Chlorobenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
16. Chloroethane	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
17. Chloroform	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
18. Chloromethane	U	V-	μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
19.2-Chlorotoluene	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
21. Dibromochloromethane	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
22. Dibromomethane	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
23.1,2-Dichlorobenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
24.1,3-Dichlorobenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
25.1,4-Dichlorobenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
29.1,1-Dichloroethene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
35. Ethylbenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
36. Ethylene Dibromide	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order: A07755
Page: 3 of 10
Date: 04/06/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: FIELDBLANK_040422 Chain of Custody: 201041

Client Project Name: TRW Milford ZF Active Safety Sample No: Collect Date: 04/04/22

(30046730)

Client Project No: 30046730 Sample Matrix: Blank: Field Collect Time: 11:45

Sample Comments:

61. o-Xylene

‡ 62. Xylenes

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/N	IS			Aliq	uot ID:	A07755-001	Matrix:	Blank: Field		
Method: EPA 5030C/EPA 8260D				Des	cription:	FIELDBLANK_04	0422			
						Prepara	ation	Ana	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
37.2-Hexanone	U		μg/L	50	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
38. Isopropylbenzene	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
39. 4-Methyl-2-pentanone	U		μg/L	50	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
40. Methylene Chloride	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
‡ 41.2-Methylnaphthalene	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
42. MTBE	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
43. Naphthalene	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
44. n-Propylbenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
45. Styrene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
46.1,1,1,2-Tetrachloroethane	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
47.1,1,2,2-Tetrachloroethane	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
48. Tetrachloroethene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
49. Toluene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
50.1,2,4-Trichlorobenzene	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
51.1,1,1-Trichloroethane	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
‡ 52.1,1,2-Trichloroethane	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
53. Trichloroethene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
54. Trichlorofluoromethane	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
55.1,2,3-Trichloropropane	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
‡ 56.1,2,3-Trimethylbenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
57. 1,2,4-Trimethylbenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
58.1,3,5-Trimethylbenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
59. Vinyl Chloride	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF
60. m&p-Xylene	U		μg/L	2.0	1.0	04/05/22	VI22D05B	04/06/22 00:21	VI22D05B	JMF

1.0

3.0

1.0

1.0

04/05/22

04/05/22

μg/L

μg/L

U

U

VI22D05B 04/06/22 00:21 VI22D05B

VI22D05B 04/06/22 00:21 VI22D05B JMF



Order: A07755 Page: 4 of 10 Date: 04/06/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2_040422 Chain of Custody: 201041

Client Project Name: TRW Milford ZF Active Safety Sample No: Collect Date: 04/04/22 (30046730)

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 11:55

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/	MS			Aliq	uot ID:	A07755-002	Matrix:	Ground Water		
Method: EPA 5030C/EPA 8260D				Des	cription:	OW-16D2_040422				
						Prepara	tion	Ana	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U		μg/L	50	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
3. Benzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
4. Bromobenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
5. Bromochloromethane	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
6. Bromodichloromethane	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
7. Bromoform	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
8. Bromomethane	U	V- L-	μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
9.2-Butanone	U		μg/L	25	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
10. n-Butylbenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
11. sec-Butylbenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
12. tert-Butylbenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
13. Carbon Disulfide	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
15. Chlorobenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
16. Chloroethane	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
17. Chloroform	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
18. Chloromethane	U	V-	μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
19.2-Chlorotoluene	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
21. Dibromochloromethane	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
22. Dibromomethane	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
23.1,2-Dichlorobenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
24.1,3-Dichlorobenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
25.1,4-Dichlorobenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
27.1,1-Dichloroethane	3.5		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
29.1,1-Dichloroethene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
30. cis-1,2-Dichloroethene	19		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
31. trans-1,2-Dichloroethene	1.7		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
35. Ethylbenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
36. Ethylene Dibromide	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF

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Sample Description: **OW-16D2_040422** Client Identification: Arcadis U.S., Inc. - Novi Chain of Custody: 201041

Client Project Name: TRW Milford ZF Active Safety 04/04/22 Sample No: Collect Date: (30046730)

Client Project No: 30046730 Sample Matrix: **Ground Water** Collect Time: 11:55

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable #: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by	GC/MS		Al	iquot ID:	A07755-002	Matrix:	Ground Water		
Method: EPA 5030C/EPA 8260D			De	escription:	OW-16D2_040422				
					Prepara	tion	Ana	alysis	
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
37.2-Hexanone	U	μg/L	50	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
38. Isopropylbenzene	U	μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
39.4-Methyl-2-pentanone	U	μg/L	50	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
40. Methylene Chloride	U	μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
‡ 41.2-Methylnaphthalene	U	μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
42. MTBE	U	μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
43. Naphthalene	U	μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
44. n-Propylbenzene	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
45. Styrene	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
46.1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
47.1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
48. Tetrachloroethene	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
49. Toluene	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
50.1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
‡ 52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
53. Trichloroethene	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
55.1,2,3-Trichloropropane	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
‡ 56.1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
57.1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
58.1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
59. Vinyl Chloride	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
60. m&p-Xylene	U	μg/L	2.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
61. o-Xylene	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF
‡ 62. Xylenes	U	μg/L	3.0	1.0	04/05/22	VI22D05B	04/06/22 02:59	VI22D05B	JMF

DCSID: G-610.20 (08/26/2021)



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Date: 04/06/22

Matrix: Blank: Equipment

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: EQUIPMENTBLANK_040422 Chain of Custody: 201041

Client Project Name: TRW Milford ZF Active Safety Sample No: Collect Date: 04/04/22

A07755-003

Aliquot ID:

(30046730)

Volatile Organic Compounds (VOCs) by GC/MS

Client Project No: 30046730 Sample Matrix: Blank: Equipment Collect Time: 12:10

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Method: EPA 5030C/EPA 8260D				Des	cription:	EQUIPMENTBLANI	K_040422			
						Preparati	on	Ana	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U		μg/L	50	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
3. Benzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
4. Bromobenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
5. Bromochloromethane	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
6. Bromodichloromethane	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
7. Bromoform	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
8. Bromomethane	U	V- L-	μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
9.2-Butanone	U		μg/L	25	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
10. n-Butylbenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
11. sec-Butylbenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
12. tert-Butylbenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
13. Carbon Disulfide	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
15. Chlorobenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
16. Chloroethane	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
17. Chloroform	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
18. Chloromethane	U	V-	μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
19.2-Chlorotoluene	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
21. Dibromochloromethane	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
22. Dibromomethane	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
23.1,2-Dichlorobenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
24.1,3-Dichlorobenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
25.1,4-Dichlorobenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
29.1,1-Dichloroethene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
35. Ethylbenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
36. Ethylene Dibromide	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order: A07755 Page: 7 of 10 Date: 04/06/22

Sample Description: **EQUIPMENTBLANK_040422** Client Identification: Arcadis U.S., Inc. - Novi Chain of Custody: 201041

Client Project Name: TRW Milford ZF Active Safety 04/04/22 Collect Date: Sample No:

(30046730)

Client Project No: 30046730 Sample Matrix: Blank: Equipment Collect Time: 12:10

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable #: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GO	C/MS		Al	iquot ID:	A07755-003	Matrix:	Blank: Equipme	nt	
Method: EPA 5030C/EPA 8260D			De	scription:	EQUIPMENTBL	ANK_040422			
					Prepa	aration	An	alysis	
Parameter(s)	Result	Q Unit	s Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
37.2-Hexanone	U	μg/l	_ 50	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
38. Isopropylbenzene	U	μg/l	_ 5.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
39.4-Methyl-2-pentanone	U	μg/l	_ 50	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
40. Methylene Chloride	U	μg/l	_ 5.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
‡ 41.2-Methylnaphthalene	U	μg/l	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
42. MTBE	U	μg/l	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
43. Naphthalene	U	μg/l	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
44. n-Propylbenzene	U	μg/l	_ 1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
45. Styrene	U	μg/l	_ 1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
46.1,1,1,2-Tetrachloroethane	U	μg/l	_ 1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
47.1,1,2,2-Tetrachloroethane	U	μg/l	_ 1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
48. Tetrachloroethene	U	μg/l	_ 1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
49. Toluene	U	μg/l	_ 1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
50.1,2,4-Trichlorobenzene	U	μg/l	5.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
51.1,1,1-Trichloroethane	U	μg/l	_ 1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
‡ 52.1,1,2-Trichloroethane	U	μg/l	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
53. Trichloroethene	U	μg/l	_ 1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
54. Trichlorofluoromethane	U	μg/l	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
55. 1,2,3-Trichloropropane	U	μg/l	_ 1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
‡ 56.1,2,3-Trimethylbenzene	U	μg/l	_ 1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
57. 1,2,4-Trimethylbenzene	U	μg/l	_ 1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
58.1,3,5-Trimethylbenzene	U	μg/l	1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
59. Vinyl Chloride	U	μg/l	_ 1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
60. m&p-Xylene	U	μg/l	2.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
61.o-Xylene	U	μg/l	_ 1.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF
‡ 62. Xylenes	U	μg/l	3.0	1.0	04/05/22	VI22D05B	04/06/22 00:48	VI22D05B	JMF



Order: A07755
Page: 8 of 10
Date: 04/06/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: TRIP BLANK Chain of Custody: N/A

Client Project Name: TRW Milford ZF Active Safety Sample No: Collect Date: 04/04/22

Aliquot ID:

A07755-004

Matrix: Blank: Trip

(30046730)

Volatile Organic Compounds (VOCs) by GC/MS

Client Project No: 30046730 Sample Matrix: Blank: Trip Collect Time: NA

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Method: EPA 5030C/EPA 8260D				-		TRIP BLANK	WIGHTA.	ыапк: тпр		
						Prepar	ation	Ana	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U		μg/L	50	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
3. Benzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
4. Bromobenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
5. Bromochloromethane	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
6. Bromodichloromethane	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
7. Bromoform	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
8. Bromomethane	U	V- L-	μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
9.2-Butanone	U		μg/L	25	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
10. n-Butylbenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
11. sec-Butylbenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
12. tert-Butylbenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
13. Carbon Disulfide	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
15. Chlorobenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
16. Chloroethane	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
17. Chloroform	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
18. Chloromethane	U	V-	μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
19.2-Chlorotoluene	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
21. Dibromochloromethane	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
22. Dibromomethane	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
23.1,2-Dichlorobenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
24.1,3-Dichlorobenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
25.1,4-Dichlorobenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
29.1,1-Dichloroethene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
35. Ethylbenzene	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
36. Ethylene Dibromide	U		μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF

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Order: A07755
Page: 9 of 10
Date: 04/06/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: TRIP BLANK Chain of Custody: N/A

Client Project Name: TRW Milford ZF Active Safety Sample No: Collect Date: 04/04/22

(30046730)

Client Project No: 30046730 Sample Matrix: Blank: Trip Collect Time: NA

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by Method: EPA 5030C/EPA 8260D	GC/MS			quot ID: scription:	A07755-004 TRIP BLANK	Matrix:	Blank: Trip		
					Prepa	ration	An	alysis	
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
37.2-Hexanone	U	μg/L	50	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
38. Isopropylbenzene	U	μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
39.4-Methyl-2-pentanone	U	μg/L	50	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
40. Methylene Chloride	U	μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
‡ 41.2-Methylnaphthalene	U	μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
42. MTBE	U	μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
43. Naphthalene	U	μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
44. n-Propylbenzene	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
45. Styrene	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
46.1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
47.1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
48. Tetrachloroethene	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
49. Toluene	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
50.1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
‡ 52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
53. Trichloroethene	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
55.1,2,3-Trichloropropane	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
‡ 56.1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
57.1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
58.1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
59. Vinyl Chloride	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
60. m&p-Xylene	U	μg/L	2.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
61. o-Xylene	U	μg/L	1.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF
‡ 62. Xylenes	U	μg/L	3.0	1.0	04/05/22	VI22D05B	04/06/22 01:14	VI22D05B	JMF



Analytical Laboratory Report Laboratory Project Number: A07755

Order: A07755 Page: 10 of 10 Date: 04/06/22

Definitions/ Qualifiers:

- A: Spike recovery or precision unusable due to dilution.
- **B:** The analyte was detected in the associated method blank.
- E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
- J: The concentration is an estimated value.
- M: Modified Method
- U: The analyte was not detected at or above the reporting limit.
- X: Matrix Interference has resulted in a raised reporting limit or distorted result.
- W: Results reported on a wet-weight basis.
- *: Value reported is outside QC limits

Exception Summary:

L- : Recovery in the associated laboratory sample (LCS) exceeds the lower control limit. Results may be biased low.
 V- : Recovery in the associated continuing calibration verification sample (CCV) exceeds the lower control limit. Results may be biased low.

Analysis Locations:

All analyses performed in Holt.



Accreditation Number(s):

T104704518-19-8 (TX)



Order ID: A07755 Page: 1 of 5 Date: 04/06/22

VI22D05B: Method Blank (MB)

Run Time: VI22D05B.MB 04/05/2022 23:54 [VI	22D05B]				
	MB Result	MB MB RDL			
		Qualifier			
Analyte	μg/L	μg/L			
Acetone	U	50			
Acrylonitrile	U	2.0			
Benzene	U	1.0			
Bromobenzene	U	1.0			
Bromochloromethane	U	1.0			
Bromodichloromethane	U	1.0			
Bromoform	U	1.0			
Bromomethane	U	5.0			
2-Butanone	U	25			
n-Butylbenzene	U	1.0			
sec-Butylbenzene	U	1.0			
tert-Butylbenzene	U	1.0			
Carbon Disulfide	U	5.0			
Carbon Tetrachloride	U	1.0			
Chlorobenzene	U	1.0			
Chloroethane	U	5.0			
Chloroform	U	1.0			
Chloromethane	U	5.0			
2-Chlorotoluene	U	5.0			
1,2-Dibromo-3-chloropropane (SIM)	U	1.0			
Dibromochloromethane	U	5.0			
Dibromomethane	U	5.0			
1,2-Dichlorobenzene	U	1.0			
1,3-Dichlorobenzene	U	1.0			
1,4-Dichlorobenzene	U	1.0			
Dichlorodifluoromethane	U	5.0			
1,1-Dichloroethane	U	1.0			
1,2-Dichloroethane	U	1.0			
1,1-Dichloroethene	U	1.0			
cis-1,2-Dichloroethene	U	1.0			
trans-1,2-Dichloroethene	U	1.0			
1,2-Dichloropropane	U	1.0			
cis-1,3-Dichloropropene	U	0.50			
	1914 Holloway Drive	Holt, MI 48842	T: (517) 699-0345	F: (517) 699-0388	

DCSID: G-6017.2 (06/10/2020) | lab@fibertec.us | RSN: VI22D05B-22960406123105

T: (810) 220-3300

T: (231) 775-8368

F: (810) 220-3311

F: (231) 775-8584

Brighton, MI 48116

Cadillac, MI 49601

11766 E. Grand River

8660 S. Mackinaw Trail



Order ID: A07755 Page: 2 of 5 Date: 04/06/22

VI22D05B: Method Blank (MB)

Run Time: VI22D05B.MB 04/05/2022 2			
	MB Result	MB	MB RDL
		Qualifier	
Analyte	μg/L		μg/L
trans-1,3-Dichloropropene	U		0.50
Ethylbenzene	U		1.0
Ethylene Dibromide	U		1.0
2-Hexanone	U		50
Isopropylbenzene	U		5.0
4-Methyl-2-pentanone	U		50
Methylene Chloride	U		5.0
2-Methylnaphthalene	U		5.0
MTBE	U		5.0
Naphthalene	U		5.0
n-Propylbenzene	U		1.0
Styrene	U		1.0
1,1,1,2-Tetrachloroethane	U		1.0
1,1,2,2-Tetrachloroethane	U		1.0
Tetrachloroethene	U		1.0
Toluene	U		1.0
1,2,4-Trichlorobenzene	U		5.0
1,1,1-Trichloroethane	U		1.0
1,1,2-Trichloroethane	U		1.0
Trichloroethene	U		1.0
Trichlorofluoromethane	U		1.0
1,2,3-Trichloropropane	U		1.0
1,2,3-Trimethylbenzene	U		1.0
1,2,4-Trimethylbenzene	U		1.0
1,3,5-Trimethylbenzene	U		1.0
Vinyl Chloride	U		1.0
m&p-Xylene	U		2.0
o-Xylene	U		1.0
4-Bromofluorobenzene(S)	100		80-120
Dibromofluoromethane(S)	101		80-120
1,2-Dichloroethane-d4(S)	94		80-120
Toluene-d8(S)	99		80-120

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order ID: A07755 Page: 3 of 5 Date: 04/06/22

VI22D05B: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VI22D05B.LCS: 04/05/2022 22:09 [05B.LCSD: 04/05/20	-	-	1.00	1.000	1.000	1.000	1.000	DDD	DDD Limits	DDD
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD Qualifier
Analyte	Spike Am μg/L	ount μg/L	%	%	Qualifier	Spike Amount μg/L	μg/L	Rec. %	Qualifier	%	%	Qualifier
Acetone	50.0	30.6	61	54-140		50.0	31.1	62		2	20	
Acrylonitrile	50.0	52.7	105	70-130		50.0	53.7	107		2	20	
Benzene	50.0	46.5	93	80-120		50.0	45.1	90		3	20	
Bromobenzene	50.0	44.7	89	75-125		50.0	44.2	88		1	20	
Bromochloromethane	50.0	40.7	81	70-130		50.0	40.1	80		1	20	
Bromodichloromethane	50.0	44.5	89	75-120		50.0	43.5	87		2	20	
Bromoform	50.0	45.8	92	70-130		50.0	45.4	91		1	20	
Bromomethane	50.0	27.5	55	68-135	*	50.0	29.1	58	*	5	20	
2-Butanone	50.0	40.1	80	70-148		50.0	40.5	81		1	20	
n-Butylbenzene	50.0	52.8	106	70-133		50.0	51.9	104		2	20	
sec-Butylbenzene	50.0	50.2	100	70-125		50.0	49.4	99		1	20	
ert-Butylbenzene	50.0	49.5	99	70-130		50.0	48.6	97		2	20	
Carbon Disulfide	50.0	44.6	89	70-130		50.0	42.8	86		3	20	
Carbon Tetrachloride	50.0	44.5	89	70-130		50.0	43.3	87		2	20	
Chlorobenzene	50.0	45.9	92	80-120		50.0	44.8	90		2	20	
Chloroethane	50.0	40.5	81	61-130		50.0	39.1	78		4	20	
Chloroform	50.0	44.2	88	80-120		50.0	43.4	87		1	20	
Chloromethane	50.0	38.4	77	67-125		50.0	38.9	78		1	20	
2-Chlorotoluene	50.0	47.3	95	75-125		50.0	46.6	93		2	20	
,2-Dibromo-3-chloropropane (SIM)	50.0	48.5	97	70-130		50.0	49.6	99		2	20	
Dibromochloromethane	50.0	44.6	89	70-130		50.0	43.3	87		2	20	
Dibromomethane	50.0	41.6	83	75-125		50.0	40.4	81		2	20	
1,2-Dichlorobenzene	50.0	46.9	94	70-120		50.0	46.2	92		2	20	
1,3-Dichlorobenzene	50.0	45.8	92	75-125		50.0	45.0	90		2	20	
1,4-Dichlorobenzene	50.0	43.3	87	75-125		50.0	42.5	85		2	20	
Dichlorodifluoromethane	50.0	53.5	107	70-136		50.0	51.0	102		5	20	
1,1-Dichloroethane	50.0	45.9	92	70-130		50.0	44.5	89		3	20	
,2-Dichloroethane	50.0	40.9	82	70-130		50.0	39.7	79		4	20	
,1-Dichloroethene	50.0	43.8	88	78-120		50.0	42.1	84		5	20	
cis-1,2-Dichloroethene	50.0	44.8	90	70-125		50.0	43.2	86		5	20	
trans-1,2-Dichloroethene	50.0	44.5	89	70-130		50.0	43.5	87		2	20	
1,2-Dichloropropane	50.0	49.1	98	80-121		50.0	47.4	95		3	20	
cis-1,3-Dichloropropene	50.0	43.4	87	70-130		50.0	42.2	84		4	20	

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order ID: A07755 Page: 4 of 5 Date: 04/06/22

VI22D05B: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VI22D05B.LCS: 04/05/2022 22:	09 [VI22D05B] VI22D0	5B.LCSD: 04/05/20)22 22:35 [VI22	D05B]								
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Am	ount			Qualifier	Spike Amoun	t Result	Rec.	Qualifier			Qualifier
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
trans-1,3-Dichloropropene	50.0	48.2	96	70-132		50.0	46.7	93		3	20	
Ethylbenzene	50.0	48.4	97	80-120		50.0	47.0	94		3	20	
Ethylene Dibromide	50.0	45.2	90	80-120		50.0	44.4	89		1	20	
2-Hexanone	50.0	39.4	79	70-130		50.0	40.5	81		3	20	
Isopropylbenzene	50.0	48.7	97	75-125		50.0	47.5	95		2	20	
4-Methyl-2-pentanone	50.0	55.2	110	70-130		50.0	54.7	109		1	20	
Methylene Chloride	50.0	43.8	88	70-130		50.0	42.7	85		3	20	
2-Methylnaphthalene	50.0	46.0	92	70-130		50.0	46.5	93		1	20	
MTBE	50.0	48.3	97	70-125		50.0	47.3	95		2	20	
Naphthalene	50.0	46.7	93	70-130		50.0	47.5	95		2	20	
n-Propylbenzene	50.0	49.4	99	70-130		50.0	48.8	98		1	20	
Styrene	50.0	41.0	82	70-130		50.0	39.7	79		4	20	
1,1,1,2-Tetrachloroethane	50.0	46.7	93	80-130		50.0	45.2	90		3	20	
1,1,2,2-Tetrachloroethane	50.0	59.4	119	70-130		50.0	60.5	121		2	20	
Tetrachloroethene	50.0	48.5	97	70-130		50.0	46.9	94		3	20	
Toluene	50.0	47.9	96	80-120		50.0	46.4	93		3	20	
1,2,4-Trichlorobenzene	50.0	45.9	92	70-130		50.0	46.0	92		0	20	
1,1,1-Trichloroethane	50.0	45.5	91	70-130		50.0	44.3	89		2	20	
1,1,2-Trichloroethane	50.0	47.6	95	75-125		50.0	47.1	94		1	20	
Trichloroethene	50.0	41.6	83	71-125		50.0	39.9	80		4	20	
Trichlorofluoromethane	50.0	48.2	96	70-133		50.0	46.6	93		3	20	
1,2,3-Trichloropropane	50.0	49.9	100	75-125		50.0	49.3	99		1	20	
1,2,3-Trimethylbenzene	50.0	47.0	94	70-130		50.0	46.2	92		2	20	
1,2,4-Trimethylbenzene	50.0	49.1	98	75-130		50.0	48.7	97		1	20	
1,3,5-Trimethylbenzene	50.0	49.1	98	75-130		50.0	48.1	96		2	20	
Vinyl Chloride	50.0	43.9	88	74-125		50.0	42.2	84		5	20	
n&p-Xylene	100	95.1	95	75-130		100	92.8	93		2	20	
o-Xylene	50.0	47.9	96	80-120		50.0	46.3	93		3	20	
4-Bromofluorobenzene(S)			100	80-120				101				
Dibromofluoromethane(S)			99	80-120				98				
1,2-Dichloroethane-d4(S)			91	80-120				90				
Toluene-d8(S)			100	80-120				100				

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order ID: A07755 Page: 5 of 5 Date: 04/06/22

Definitions/ Qualifiers:

- U: The analyte was not detected at or above the Reporting Limit (RL).
- *: Value reported is outside QC limits

Exception Summary:

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

Report Generated By:

By Sue Ricketts at 12:32 PM, Apr 06, 2022

RSN: VI22D05B-22960406123105

FiberteC environmental services

Analytical Laboratory

1914 Holloway Drive Holt, MI 48842

Phone: 517 699 0345 Fax: 517 699 0388

email: lab@fibertec.us

Andry lical Education

8660 \$. Mackinaw Trail Cadillac, MI 49601

Phone: 231 775 8368 Fax: 231 775 8584 Geoprobe

11766 E. Grand River Rd. Brighton, MI 48116

Phone: 810 220 3300 Fax: 810 220 3311 Chain of Custody # 201041
PAGE ____ of ____

Client Nam	ne: Avc	adis						PARAME	TERS		I	Matrix Code Deliverables
Contact Pe	erson: M	LING	Jamp			8						S Soil Gw Ground Water A Air Sw Surface Water Level 3
TRW	Millon	10	30046730	R CODE)		g					필	O Oil WW Waste Water Level 4
Email distrib	oution list:	inte	30046730 Darcadis com	MATRIX (SEE RIGHT CORNER FOR CODE)	ERS	87 LOB				Ш	HOLD SAMPLE	P Wipe X Other: Specify EDD
Quote#	I IVICI		real Charles Conve	E RIGHT	I A I	1 1					일 모	
Purchase (130.000IZ	ATRIX (SE	# OF CONTAINERS	YOUS				Н		
Date	Time	Sample #			#	3	+++		+		+	Remarks:
4.4.2		-	FIELDBLANK_040422	6W	3	3	+++	100	+	-	+	
4.4.22			0W-16D2-040422	_		3	+	++	-		+	+
4.4.22	1210		EQUIPMENTBLANK_040422	GW	3	2			+			Received By Lab
												APR 0 4 2022
1												initials Et
				4 - 4								Received
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Comments	:			- 4	_				_			
Sampled/R	telinquished B	nula		Date	/ Time	2	1230	Receive	ed By:	~ M	av	End Areactis
Relinquishe	d By:	lase	tich/Arradis	Date	/ Time	12	1415	Receive	во Ву:	+00	-	4 A
Relinquishe	d By:	Manc	TICHTAICACIS		/ Time		1710	Receive	ed By L	aboratory	<u>)</u> (:	(me)
		Tu	urnaround Time ALL RESULTS WILL BE SENT BY THE END O	F THE BU	JSINE	SS DAY		1	_	1	_	LAB USE ONLY
1 b	us. day	X_2	bus, day (48)3 bus, days							Fibert	ec pr	roject number: AO7755
5-7	bus, days (sto	andard)	Other (specify time/date requirement):							Temp	eratu	re upon receipt at Lab: 2.0%
			Pleas	se see	bc	ick fo	or terms a	nd con	ditior	ns		



Friday, June 17, 2022

Fibertec Project Number: A08975

Project Identification: ZF Active Safety US Inc. (Milford) /

Submittal Date: 06/08/2022

Ms. Stacey Hannula Arcadis U.S., Inc. - Novi 28550 Cabot Drive Suite 500 Novi, MI 48377

Dear Ms. Hannula,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

By Sue Ricketts at 9:55 AM, Jun 17, 2022

For Daryl P. Strandbergh Laboratory Director

Enclosures



Order: A0 Date: 06

Matrix: Ground Water

A08975 06/17/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2_060822 Chain of Custody: 203194

Client Project Name: ZF Active Safety US Inc. Sample No: Collect Date: 06/08/22

A08975-001

Aliquot ID:

(Milford)

Client Project No: NA Sample Matrix: Ground Water Collect Time: 09:35

Sample Comments:

Volatile Organic Compounds (VOCs) by GC/MS

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

volunic organic compounds (voos) by co	,									
Method: EPA 5030C/EPA 8260D				Des	cription:	OW-16D2_060822				
						Prepara	tion	Ana	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U	L-	μg/L	50	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
2. Acrylonitrile	U		μg/L	2.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
3. Benzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
4. Bromobenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
5. Bromochloromethane	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
6. Bromodichloromethane	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
7. Bromoform	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
8. Bromomethane	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
9.2-Butanone	U		μg/L	25	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
10. n-Butylbenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
11. sec-Butylbenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
12. tert-Butylbenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
13. Carbon Disulfide	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
15. Chlorobenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
16. Chloroethane	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
17. Chloroform	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
18. Chloromethane	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
19.2-Chlorotoluene	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
21. Dibromochloromethane	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
22. Dibromomethane	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
27.1,1-Dichloroethane	3.6		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
28. 1,2-Dichloroethane	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
29. 1,1-Dichloroethene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
30. cis-1,2-Dichloroethene	19		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
31. trans-1,2-Dichloroethene	1.4		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
35. Ethylbenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
36. Ethylene Dibromide	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order: A0 Date: 06

A08975 06/17/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2_060822 Chain of Custody: 203194

Client Project Name: ZF Active Safety US Inc. Sample No: Collect Date: 06/08/22 (Milford)

Client Project No: NA Sample Matrix: Ground Water Collect Time: 09:35

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/	MS			Aliq	uot ID:	A08975-001	Matrix:	Ground Water		
Method: EPA 5030C/EPA 8260D				Des	cription:	OW-16D2_060822				
						Prepara	tion	An	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
38. Isopropylbenzene	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
39. 4-Methyl-2-pentanone	U		μg/L	50	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
40. Methylene Chloride	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
‡ 41.2-Methylnaphthalene	U	V-	μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
42.MTBE	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
43. Naphthalene	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
44. n-Propylbenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
45. Styrene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
46.1,1,1,2-Tetrachloroethane	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
47.1,1,2,2-Tetrachloroethane	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
48. Tetrachloroethene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
49. Toluene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
50.1,2,4-Trichlorobenzene	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
51.1,1,1-Trichloroethane	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
‡ 52.1,1,2-Trichloroethane	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
53. Trichloroethene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
54. Trichlorofluoromethane	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
55.1,2,3-Trichloropropane	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
‡ 56.1,2,3-Trimethylbenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
57.1,2,4-Trimethylbenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
58.1,3,5-Trimethylbenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
59. Vinyl Chloride	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
60. m&p-Xylene	U		μg/L	2.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
61. o-Xylene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
‡ 62. Xylenes	U		μg/L	3.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC



Order: A08975 Date: 06/17/22

Matrix: Ground Water

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2R1_060822 Chain of Custody: 203194

Client Project Name: ZF Active Safety US Inc. Sample No: Collect Date: 06/08/22

A08975-002

Aliquot ID:

(Milford)

Client Project No: NA Sample Matrix: Ground Water Collect Time: 11:00

Sample Comments:

Volatile Organic Compounds (VOCs) by GC/MS

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volume Organic Compounds (VOCS) by Co.										
Method: EPA 5030C/EPA 8260D				Des	cription:	OW-16D2R1_060	822			
						Prepar	ation	Ana	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U	L-	μg/L	50	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
3. Benzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
4. Bromobenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
5. Bromochloromethane	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
6. Bromodichloromethane	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
7. Bromoform	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
8. Bromomethane	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
9.2-Butanone	U		μg/L	25	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
10. n-Butylbenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
11. sec-Butylbenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
12. tert-Butylbenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
13. Carbon Disulfide	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
15. Chlorobenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
16. Chloroethane	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
17. Chloroform	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
18. Chloromethane	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
19.2-Chlorotoluene	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
21. Dibromochloromethane	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
22. Dibromomethane	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
23.1,2-Dichlorobenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
27.1,1-Dichloroethane	2.5		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
29.1,1-Dichloroethene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
30. cis-1,2-Dichloroethene	21		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
31. trans-1,2-Dichloroethene	1.1		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
35. Ethylbenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
36. Ethylene Dibromide	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
37.2-Hexanone	U			50		06/13/22		06/14/22 02:07		

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Definitions:

Analytical Laboratory Report Laboratory Project Number: A08975 Laboratory Sample Number: A08975-002

Order: A08975 06/17/22 Date:

Arcadis U.S., Inc. - Novi OW-16D2R1_060822 203194 Client Identification: Sample Description: Chain of Custody:

06/08/22 Client Project Name: ZF Active Safety US Inc. Collect Date: Sample No:

‡: Parameter not included in NELAC Scope of Analysis.

(Milford) Client Project No: NA Sample Matrix: **Ground Water** Collect Time: 11:00

NA: Not Applicable

Sample Comments:

Q: Qualifier (see definitions at end of report)

Volatile Organic Compounds (VOCs) by GC/MS Aliquot ID: A08975-002 Matrix: Ground Water

Method: EPA 5030C/EPA 8260D Description: OW-16D2R1_060822

Method: EPA 5030C/EPA 8260D				Des	cription: C	JW-16D2K1_0608	322			
						Prepara			alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
38. Isopropylbenzene	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
39.4-Methyl-2-pentanone	U		μg/L	50	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
40. Methylene Chloride	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
‡ 41.2-Methylnaphthalene	U	V-	μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
42.MTBE	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
43. Naphthalene	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
44. n-Propylbenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
45. Styrene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
46.1,1,1,2-Tetrachloroethane	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRO
47.1,1,2,2-Tetrachloroethane	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRO
48. Tetrachloroethene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRO
49. Toluene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRO
50.1,2,4-Trichlorobenzene	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRO
51.1,1,1-Trichloroethane	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRO
52.1,1,2-Trichloroethane	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRO
53. Trichloroethene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRO
54. Trichlorofluoromethane	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRO
55.1,2,3-Trichloropropane	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRO
56.1,2,3-Trimethylbenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRO
57. 1,2,4-Trimethylbenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRO
58.1,3,5-Trimethylbenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
59. Vinyl Chloride	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
60. m&p-Xylene	U		μg/L	2.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
61. o-Xylene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
‡ 62. Xylenes	U		μg/L	3.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC



Order: A08975 Date: 06/17/22

11:10

Matrix: Blank: Field

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Field Blank Chain of Custody: 203194

Client Project Name: ZF Active Safety US Inc. Sample No: Collect Date: 06/08/22

Aliquot ID:

A08975-003

(Milford)

Client Project No: NA Sample Matrix: Blank: Field Collect Time:

Sample Comments:

Volatile Organic Compounds (VOCs) by GC/MS

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Method: EPA 0624.1/EPA 8260D	7.W.O			-		Field Blank	Widu IX.	Siank: Fleid		
						Prepa	ration	An	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U	V+	μg/L	50	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
‡ 2. Acrylonitrile	U	V+ L+	μg/L	2.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
3. Benzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
4. Bromobenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNO
5. Bromochloromethane	U	V+	μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNO
6. Bromodichloromethane	U	V+ L+	μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNO
7. Bromoform	U	V+ L+	μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNO
8. Bromomethane	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
9.2-Butanone	U	V+	μg/L	25	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
10. n-Butylbenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNO
11. sec-Butylbenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNO
12. tert-Butylbenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNO
13. Carbon Disulfide	U	V+	μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNO
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SN
15. Chlorobenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNO
16. Chloroethane	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNO
17. Chloroform	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNO
18. Chloromethane	U	V+	μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNO
19.2-Chlorotoluene	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNO
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U	V+	μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNO
21. Dibromochloromethane	U	V+	μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNO
22. Dibromomethane	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNO
23.1,2-Dichlorobenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNO
24.1,3-Dichlorobenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNO
25.1,4-Dichlorobenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNO
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNO
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNO
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SN
29.1,1-Dichloroethene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNO
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNO
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNO
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNO
33. cis-1,3-Dichloropropene	U	V+	μg/L	0.50	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNO
34. trans-1,3-Dichloropropene	U	V+ L+	μg/L	0.50	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNO

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368 F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584



Order: A08975 Date: 06/17/22

11:10

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Field Blank Chain of Custody: 203194

Client Project Name: ZF Active Safety US Inc. Sample No: Collect Date: 06/08/22

(Milford)

Client Project No: NA Sample Matrix: Blank: Field Collect Time:

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GO	C/MS			Aliq	uot ID:	A08975-003	Matrix: I	Blank: Field		
Method: EPA 0624.1/EPA 8260D				Des	cription:	Field Blank				
						Prepai	ation	An	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
35. Ethylbenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
36. Ethylene Dibromide	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
37.2-Hexanone	U	V+	μg/L	50	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
38. Isopropylbenzene	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
39. 4-Methyl-2-pentanone	U	V+ L+	μg/L	50	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
40. Methylene Chloride	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
‡ 41.2-Methylnaphthalene	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
42.MTBE	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
43. Naphthalene	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
44. n-Propylbenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
45. Styrene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
46.1,1,1,2-Tetrachloroethane	U	V+	μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
47.1,1,2,2-Tetrachloroethane	U	V+ L+	μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
48. Tetrachloroethene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
49. Toluene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
50.1,2,4-Trichlorobenzene	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
51.1,1,1-Trichloroethane	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
‡ 52.1,1,2-Trichloroethane	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
53. Trichloroethene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
54. Trichlorofluoromethane	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
55. 1,2,3-Trichloropropane	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
‡ 56.1,2,3-Trimethylbenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
57. 1,2,4-Trimethylbenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
58. 1,3,5-Trimethylbenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
59. Vinyl Chloride	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
60. m&p-Xylene	U		μg/L	2.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
61. o-Xylene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
‡ 62. Xylenes	U		μg/L	3.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC



Order: A08975 Date: 06/17/22

Matrix: Blank: Equipment

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Equipment Blank Chain of Custody: 203194

Client Project Name: ZF Active Safety US Inc. Sample No: Collect Date: 06/08/22

Aliquot ID:

A08975-004

(Milford)

Volatile Organic Compounds (VOCs) by GC/MS

Client Project No: NA Sample Matrix: Blank: Equipment Collect Time: 11:12

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Mathed: EDA 5020C/EDA 92COD				-		AU0975-UU4		Biank: Equipme		
Method: EPA 5030C/EPA 8260D				Des	cription:	Equipment Blank				
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prepara P. Date	tion P. Batch	An Date	alysis A. Batch	Init.
1. Acetone	U	V+	μg/L	50	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
‡ 2. Acrylonitrile	U	V+ L+	μg/L	2.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
3. Benzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
4. Bromobenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
5. Bromochloromethane	U	V+	μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
6. Bromodichloromethane	U	V+ L+	μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
7. Bromoform	U	V+ L+	μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
8. Bromomethane	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
9.2-Butanone	U	V+	μg/L	25	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
10. n-Butylbenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
11. sec-Butylbenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
12. tert-Butylbenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
13. Carbon Disulfide	U	V+	μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
15. Chlorobenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
16. Chloroethane	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
17. Chloroform	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
18. Chloromethane	U	V+	μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
19.2-Chlorotoluene	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U	V+	μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
21. Dibromochloromethane	U	V+	μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
22. Dibromomethane	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
23.1,2-Dichlorobenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
24.1,3-Dichlorobenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
25.1,4-Dichlorobenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
29.1,1-Dichloroethene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
31.trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
33. cis-1,3-Dichloropropene	U	V+	μg/L	0.50	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
34. trans-1,3-Dichloropropene	U	V+ L+	μg/L	0.50	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368 F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584



Order: A08975 Date: 06/17/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Equipment Blank Chain of Custody: 203194

Client Project Name: ZF Active Safety US Inc. Sample No: Collect Date: 06/08/22

(Milford)

Client Project No: NA Sample Matrix: Blank: Equipment Collect Time: 11:12

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by G	C/MS			Aliq	uot ID:	A08975-004	Matrix:	Blank: Equipme	nt	
Method: EPA 5030C/EPA 8260D				Des	cription:	Equipment Blank				
						Prepara	ation	An	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
35. Ethylbenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
36. Ethylene Dibromide	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
37.2-Hexanone	U	V+	μg/L	50	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
38. Isopropylbenzene	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
39. 4-Methyl-2-pentanone	U	V+ L+	μg/L	50	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
40. Methylene Chloride	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
‡ 41.2-Methylnaphthalene	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
42.MTBE	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
43. Naphthalene	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
44. n-Propylbenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
45. Styrene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
46.1,1,1,2-Tetrachloroethane	U	V+	μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
47.1,1,2,2-Tetrachloroethane	U	V+ L+	μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
48. Tetrachloroethene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
49. Toluene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
50. 1,2,4-Trichlorobenzene	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
51.1,1,1-Trichloroethane	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
‡ 52.1,1,2-Trichloroethane	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
53. Trichloroethene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
54. Trichlorofluoromethane	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
55. 1,2,3-Trichloropropane	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
‡ 56.1,2,3-Trimethylbenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
57. 1,2,4-Trimethylbenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
58. 1,3,5-Trimethylbenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
59. Vinyl Chloride	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
60. m&p-Xylene	U		μg/L	2.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
61. o-Xylene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
‡ 62. Xylenes	U		μg/L	3.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC



Order: A08975 Date:

06/17/22

Arcadis U.S., Inc. - Novi 203194 Client Identification: Sample Description: Trip Blank Chain of Custody:

ZF Active Safety US Inc. Collect Date: 06/08/22 Client Project Name: Sample No: (Milford)

Aliquot ID:

A08975-005

Matrix: Blank: Trip

Client Project No: NA Sample Matrix: Blank: Trip Collect Time: NA

Sample Comments:

Volatile Organic Compounds (VOCs) by GC/MS

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Method: EPA 5030C/EPA 8260D				Des	cription:	Trip Blank				
						Prepar	ation	An	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U	V+	μg/L	50	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
‡ 2. Acrylonitrile	U	V+ L+	μg/L	2.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
3. Benzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
4. Bromobenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
5. Bromochloromethane	U	V+	μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
6. Bromodichloromethane	U	V+ L+	μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
7. Bromoform	U	V+ L+	μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
8. Bromomethane	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
9.2-Butanone	U	V+	μg/L	25	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
10. n-Butylbenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
11. sec-Butylbenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
12. tert-Butylbenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
13. Carbon Disulfide	U	V+	μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
15. Chlorobenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
16. Chloroethane	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
17. Chloroform	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
18. Chloromethane	U	V+	μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
19. 2-Chlorotoluene	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U	V+	μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
21. Dibromochloromethane	U	V+	μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
22. Dibromomethane	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
25.1,4-Dichlorobenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
29.1,1-Dichloroethene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
31.trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
33. cis-1,3-Dichloropropene	U	V+	μg/L	0.50	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
34. trans-1,3-Dichloropropene	U	V+ L+	μg/L	0.50	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601

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Order: Date:

A08975 06/17/22

Arcadis U.S., Inc. - Novi 203194 Client Identification: Sample Description: Trip Blank Chain of Custody: ZF Active Safety US Inc. 06/08/22 Client Project Name: Sample No: Collect Date: (Milford) Client Project No: NA Sample Matrix: Blank: Trip Collect Time: NA

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable #: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/I Method: EPA 5030C/EPA 8260D	мѕ			•		A08975-005 Trip Blank	Matrix: I	Blank: Trip		
					on paron.	Prepar	ration	Δn	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
35. Ethylbenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
36. Ethylene Dibromide	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
37.2-Hexanone	U	V+	μg/L	50	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
38. Isopropylbenzene	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
39. 4-Methyl-2-pentanone	U	V+ L+	μg/L	50	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
40. Methylene Chloride	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
‡ 41.2-Methylnaphthalene	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
42.MTBE	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
43. Naphthalene	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
44. n-Propylbenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
45. Styrene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
46.1,1,1,2-Tetrachloroethane	U	V+	μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
47.1,1,2,2-Tetrachloroethane	U	V+ L+	μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
48. Tetrachloroethene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
49. Toluene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
50.1,2,4-Trichlorobenzene	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
51.1,1,1-Trichloroethane	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
‡ 52.1,1,2-Trichloroethane	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
53. Trichloroethene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
54. Trichlorofluoromethane	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
55.1,2,3-Trichloropropane	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
‡ 56.1,2,3-Trimethylbenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
57. 1,2,4-Trimethylbenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
58.1,3,5-Trimethylbenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
59. Vinyl Chloride	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
60. m&p-Xylene	U		μg/L	2.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
61. o-Xylene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
‡ 62. Xylenes	U		μg/L	3.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC



Analytical Laboratory Report Laboratory Project Number: A08975

Order: A08975 Date: 06/17/22

Definitions/ Qualifiers:

- A: Spike recovery or precision unusable due to dilution.
- B: The analyte was detected in the associated method blank.
- E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
- J: The concentration is an estimated value.
- M: Modified Method
- U: The analyte was not detected at or above the reporting limit.
- X: Matrix Interference has resulted in a raised reporting limit or distorted result.
- W: Results reported on a wet-weight basis.
- *: Value reported is outside QC limits

Exception Summary:

L- : Recovery in the associated laboratory sample (LCS) exceeds the lower control limit. Results may be biased low.
 L+ : Recovery in the associated laboratory sample (LCS) exceeds the upper control limit. Results may be biased high.
 V- : Recovery in the associated continuing calibration verification sample (CCV) exceeds the lower control limit. Results may be biased low.
 V+ : Recovery in the associated continuing calibration verification sample (CCV) exceeds the upper control limit. Results

Analysis Locations:

All analyses performed in Holt.

may be biased high.



Accreditation Number(s):

T104704518-19-8 (TX)



Order ID: A08975 Page: 1 of 9 Date: 06/17/22

VI22F13B: Method Blank (MB)

Run Time: VI22F13B.MB 06/14/2022 00:49 [VI22F13B	B]				
	MB Result	МВ	MB RDL		
		Qualifier			
Analyte	μg/L		μg/L		
Acetone	U		50		
Acrylonitrile	U		2.0		
Benzene	U		1.0		
Bromobenzene	U		1.0		
Bromochloromethane	U		1.0		
Bromodichloromethane	U		1.0		
Bromoform	U		1.0		
Bromomethane	U		5.0		
2-Butanone	U		25		
n-Butylbenzene	U		1.0		
sec-Butylbenzene	U		1.0		
tert-Butylbenzene	U		1.0		
Carbon Disulfide	U		5.0		
Carbon Tetrachloride	U		1.0		
Chlorobenzene	U		1.0		
Chloroethane	U		5.0		
Chloroform	U		1.0		
Chloromethane	U		5.0		
2-Chlorotoluene	U		5.0		
1,2-Dibromo-3-chloropropane (SIM)	U		1.0		
Dibromochloromethane	U		5.0		
Dibromomethane	U		5.0		
1,2-Dichlorobenzene	U		1.0		
1,3-Dichlorobenzene	U		1.0		
1,4-Dichlorobenzene	U		1.0		
Dichlorodifluoromethane	U		5.0		
1,1-Dichloroethane	U		1.0		
1,2-Dichloroethane	U		1.0		
1,1-Dichloroethene	U		1.0		
cis-1,2-Dichloroethene	U		1.0		
trans-1,2-Dichloroethene	U		1.0		
1,2-Dichloropropane	U		1.0		
cis-1,3-Dichloropropene					
	U		0.50		

DCSID: G-6017.2 (06/10/2020)

RSN: VI22F13B-221680617100135

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T: (231) 775-8368

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F: (231) 775-8584

Brighton, MI 48116

Cadillac, MI 49601

11766 E. Grand River

8660 S. Mackinaw Trail



Order ID: A08975 Page: 2 of 9 Date: 06/17/22

VI22F13B: Method Blank (MB)

Run Time: VI22F13B.MB 06/14/2022 00:49 [VI22F13B]		
	MB Result	MB	MB RDL
		Qualifier	
Analyte	μg/L		μg/L
trans-1,3-Dichloropropene	U		0.50
Ethylbenzene	U		1.0
Ethylene Dibromide	U		1.0
2-Hexanone	U		50
Isopropylbenzene	U		5.0
4-Methyl-2-pentanone	U		50
Methylene Chloride	U		5.0
2-Methylnaphthalene	U		5.0
MTBE	U		5.0
Naphthalene	U		5.0
n-Propylbenzene	U		1.0
Styrene	U		1.0
1,1,1,2-Tetrachloroethane	U		1.0
1,1,2,2-Tetrachloroethane	U		1.0
Tetrachloroethene	U		1.0
Toluene	U		1.0
1,2,4-Trichlorobenzene	U		5.0
1,1,1-Trichloroethane	U		1.0
1,1,2-Trichloroethane	U		1.0
Trichloroethene	U		1.0
Trichlorofluoromethane	U		1.0
1,2,3-Trichloropropane	U		1.0
1,2,3-Trimethylbenzene	U		1.0
1,2,4-Trimethylbenzene	U		1.0
1,3,5-Trimethylbenzene	U		1.0
Vinyl Chloride	U		1.0
m&p-Xylene	U		2.0
o-Xylene	U		1.0
4-Bromofluorobenzene(S)	100		80-120
Dibromofluoromethane(S)	102		80-120
1,2-Dichloroethane-d4(S)	104		80-120
Toluene-d8(S)	101		80-120

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Order ID: A08975 Page: 3 of 9 Date: 06/17/22

VI22F13B: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VI22F13B.LCS: 06/13/2022 23:31 [VI22F13B]												
			LCS Rec.	Rec. Limits						RPD	RPD Limits	
	Spike Am				Qualifier	Spike Amoun		Rec.	Qualifier			Qualifie
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
Acetone	50.0	25.7	51	54-140	*	50.0	26.3	53	*	4	20	
Acrylonitrile	50.0	47.4	95	70-130		50.0	47.0	94		1	20	
Benzene	50.0	53.2	106	80-120		50.0	51.3	103		3	20	
Bromobenzene	50.0	47.9	96	75-125		50.0	46.7	93		3	20	
Bromochloromethane	50.0	52.6	105	70-130		50.0	51.6	103		2	20	
Bromodichloromethane	50.0	52.8	106	75-120		50.0	51.6	103		3	20	
Bromoform	50.0	50.4	101	70-130		50.0	49.7	99		2	20	
Bromomethane	50.0	63.5	127	68-135		50.0	61.9	124		2	20	
2-Butanone	50.0	41.2	82	70-148		50.0	42.3	85		4	20	
n-Butylbenzene	50.0	54.4	109	70-133		50.0	52.2	104		5	20	
sec-Butylbenzene	50.0	52.7	105	70-125		50.0	50.7	101		4	20	
ert-Butylbenzene	50.0	53.2	106	70-130		50.0	51.2	102		4	20	
Carbon Disulfide	50.0	48.6	97	70-130		50.0	46.0	92		5	20	
Carbon Tetrachloride	50.0	51.7	103	70-130		50.0	48.9	98		5	20	
Chlorobenzene	50.0	52.5	105	80-120		50.0	50.3	101		4	20	
Chloroethane	50.0	59.5	119	61-130		50.0	56.8	114		4	20	
Chloroform	50.0	52.6	105	80-120		50.0	51.2	102		3	20	
Chloromethane	50.0	59.2	118	67-125		50.0	56.5	113		4	20	
2-Chlorotoluene	50.0	54.8	110	75-125		50.0	52.5	105		5	20	
1,2-Dibromo-3-chloropropane (SIM)	50.0	46.9	94	70-130		50.0	46.9	94		0	20	
Dibromochloromethane	50.0	48.7	97	70-130		50.0	48.3	97		0	20	
Dibromomethane	50.0	48.8	98	75-125		50.0	47.8	96		2	20	
1,2-Dichlorobenzene	50.0	52.4	105	70-120		50.0	50.6	101		4	20	
1,3-Dichlorobenzene	50.0	50.2	100	75-125		50.0	48.9	98		2	20	
1,4-Dichlorobenzene	50.0	48.7	97	75-125		50.0	47.2	94		3	20	
Dichlorodifluoromethane	50.0	61.2	122	70-136		50.0	56.8	114		7	20	
1,1-Dichloroethane	50.0	56.9	114	70-130		50.0	54.8	110		4	20	
1,2-Dichloroethane	50.0	48.1	96	70-130		50.0	47.3	95		1	20	
1,1-Dichloroethene	50.0	51.4	103	78-120		50.0	48.5	97		6	20	
cis-1,2-Dichloroethene	50.0	52.9	106	70-125		50.0	51.1	102		4	20	
trans-1,2-Dichloroethene	50.0	51.4	103	70-130		50.0	48.8	98		5	20	
1,2-Dichloropropane	50.0	57.9	116	80-121		50.0	56.1	112		4	20	
cis-1,3-Dichloropropene	50.0	49.9	100	70-130		50.0	48.3	97		3	20	

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Order ID: A08975 Page: 4 of 9 Date: 06/17/22

VI22F13B: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Am	ount			Qualifier	Spike Amount		Rec.	Qualifier			Qualifier
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
rans-1,3-Dichloropropene	50.0	49.9	100	70-132		50.0	49.1	98		2	20	
Ethylbenzene	50.0	52.5	105	80-120		50.0	50.6	101		4	20	
Ethylene Dibromide	50.0	48.7	97	80-120		50.0	47.9	96		1	20	
2-Hexanone	50.0	41.7	83	70-130		50.0	41.2	82		1	20	
sopropylbenzene	50.0	52.8	106	75-125		50.0	50.4	101		5	20	
4-Methyl-2-pentanone	50.0	54.3	109	70-130		50.0	55.1	110		1	20	
Methylene Chloride	50.0	51.8	104	70-130		50.0	50.6	101		3	20	
2-Methylnaphthalene	50.0	37.2	74	70-130		50.0	38.7	77		4	20	
ИТВЕ	50.0	54.8	110	70-125		50.0	54.3	109		1	20	
Naphthalene	50.0	43.7	87	70-130		50.0	43.8	88		1	20	
n-Propylbenzene	50.0	54.7	109	70-130		50.0	52.3	105		4	20	
Styrene	50.0	44.8	90	70-130		50.0	43.6	87		3	20	
,1,1,2-Tetrachloroethane	50.0	52.6	105	80-130		50.0	51.3	103		2	20	
,1,2,2-Tetrachloroethane	50.0	59.0	118	70-130		50.0	58.3	117		1	20	
Tetrachloroethene	50.0	52.9	106	70-130		50.0	49.9	100		6	20	
l'oluene	50.0	55.0	110	80-120		50.0	53.0	106		4	20	
1,2,4-Trichlorobenzene	50.0	47.7	95	70-130		50.0	46.4	93		2	20	
,1,1-Trichloroethane	50.0	56.5	113	70-130		50.0	53.4	107		5	20	
1,1,2-Trichloroethane	50.0	52.6	105	75-125		50.0	51.2	102		3	20	
richloroethene richloroethene	50.0	47.5	95	71-125		50.0	44.8	90		5	20	
richlorofluoromethane	50.0	58.7	117	70-133		50.0	54.7	109		7	20	
,2,3-Trichloropropane	50.0	52.3	105	75-125		50.0	53.0	106		1	20	
,2,3-Trimethylbenzene	50.0	52.1	104	70-130		50.0	50.3	101		3	20	
,2,4-Trimethylbenzene	50.0	53.0	106	75-130		50.0	51.4	103		3	20	
,3,5-Trimethylbenzene	50.0	52.8	106	75-130		50.0	51.1	102		4	20	
/inyl Chloride	50.0	59.8	120	74-125		50.0	56.5	113		6	20	
n&p-Xylene	100	108	108	75-130		100	104	104		4	20	
-Xylene	50.0	53.7	107	80-120		50.0	52.2	104		3	20	
4-Bromofluorobenzene(S)			100	80-120				101				
Dibromofluoromethane(S)			103	80-120				102				
1,2-Dichloroethane-d4(S)			99	80-120				110				
Toluene-d8(S)			102	80-120				101				

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Order ID: A08975 Page: 5 of 9 Date: 06/17/22

VM22F15A: Method Blank (MB)

Run Time: VM22F15A.MB 06/15/2022 11:43 [VM2	2F15A]					
	MB Result	МВ	MB RDL			
		Qualifier				
Analyte	μg/L		μg/L			
Acetone	U		50			
Acrylonitrile	U		2.0			
Benzene	U		1.0			
Bromobenzene	U		1.0			
Bromochloromethane	U		1.0			
Bromodichloromethane	U		1.0			
Bromoform	U		1.0			
Bromomethane	U		5.0			
2-Butanone	U		25			
n-Butylbenzene	U		1.0			
sec-Butylbenzene	U		1.0			
tert-Butylbenzene	U		1.0			
Carbon Disulfide	U		5.0			
Carbon Tetrachloride	U		1.0			
Chlorobenzene	U		1.0			
Chloroethane	U		5.0			
Chloroform	U		1.0			
Chloromethane	U		5.0			
2-Chlorotoluene	U		5.0			
1,2-Dibromo-3-chloropropane (SIM)	U		1.0			
Dibromochloromethane	U		5.0			
Dibromomethane	U		5.0			
1,2-Dichlorobenzene	U		1.0			
1,3-Dichlorobenzene	U		1.0			
1,4-Dichlorobenzene	U		1.0			
Dichlorodifluoromethane	U		5.0			
1,1-Dichloroethane	U		1.0			
1,2-Dichloroethane	U		1.0			
1,1-Dichloroethene	U		1.0			
cis-1,2-Dichloroethene	U		1.0			
trans-1,2-Dichloroethene	U		1.0			
1,2-Dichloropropane	U		1.0			
cis-1,3-Dichloropropene	U		0.50			
	1914 Holloway Drive	2	Holt, MI 48842	T: (517) 699-0345	F: (517) 699-0388	

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Brighton, MI 48116

Cadillac, MI 49601

11766 E. Grand River

8660 S. Mackinaw Trail



Order ID: A08975 Page: 6 of 9 Date: 06/17/22

VM22F15A: Method Blank (MB)

Run Time: VM22F15A.MB 06/15/202			
	MB Result	MB	MB RDL
		Qualifier	
Analyte	μg/L		μg/L
trans-1,3-Dichloropropene	U		0.50
Ethylbenzene	U		1.0
Ethylene Dibromide	U		1.0
2-Hexanone	U		50
Isopropylbenzene	U		5.0
4-Methyl-2-pentanone	U		50
Methylene Chloride	U		5.0
2-Methylnaphthalene	U		5.0
MTBE	U		5.0
Naphthalene	U		5.0
n-Propylbenzene	U		1.0
Styrene	U		1.0
1,1,1,2-Tetrachloroethane	U		1.0
1,1,2,2-Tetrachloroethane	U		1.0
Tetrachloroethene	U		1.0
Toluene	U		1.0
1,2,4-Trichlorobenzene	U		5.0
1,1,1-Trichloroethane	U		1.0
1,1,2-Trichloroethane	U		1.0
Trichloroethene	U		1.0
Trichlorofluoromethane	U		1.0
1,2,3-Trichloropropane	U		1.0
1,2,3-Trimethylbenzene	U		1.0
1,2,4-Trimethylbenzene	U		1.0
1,3,5-Trimethylbenzene	U		1.0
Vinyl Chloride	U		1.0
m&p-Xylene	U		2.0
o-Xylene	U		1.0
4-Bromofluorobenzene(S)	92		80-120
Dibromofluoromethane(S)	102		80-120
1,2-Dichloroethane-d4(S)	97		80-120
Toluene-d8(S)	99		80-120

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order ID: A08975 Page: 7 of 9 Date: 06/17/22

VM22F15A: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VM22F15A.LCS: 06/15/2022 10:18 [VM22F15A] VM22F15A.LCSD: 06/15/2022 10:46 [VM22F15A]												
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Am				Qualifier	Spike Amoun		Rec.	Qualifier			Qualifier
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
Acetone	50.0	32.9	66	54-140		50.0	30.4	61		8	20	
Acrylonitrile	50.0	65.4	131	70-130	*	50.0	62.6	125		5	20	
Benzene	50.0	49.5	99	80-120		50.0	48.4	97		2	20	
Bromobenzene	50.0	49.5	99	75-125		50.0	48.1	96		3	20	
Bromochloromethane	50.0	59.5	119	70-130		50.0	57.7	115		3	20	
Bromodichloromethane	50.0	62.2	124	75-120	*	50.0	60.8	122	*	2	20	
Bromoform	50.0	85.6	171	70-130	*	50.0	85.2	170	*	1	20	
Bromomethane	50.0	53.5	107	68-135		50.0	46.5	93		14	20	
2-Butanone	50.0	52.0	104	70-148		50.0	50.8	102		2	20	
n-Butylbenzene	50.0	53.0	106	70-133		50.0	51.0	102		4	20	
sec-Butylbenzene	50.0	52.9	106	70-125		50.0	51.2	102		4	20	
tert-Butylbenzene	50.0	51.5	103	70-130		50.0	50.4	101		2	20	
Carbon Disulfide	50.0	60.2	120	70-130		50.0	59.9	120		0	20	
Carbon Tetrachloride	50.0	54.8	110	70-130		50.0	51.6	103		7	20	
Chlorobenzene	50.0	51.5	103	80-120		50.0	50.6	101		2	20	
Chloroethane	50.0	55.1	110	61-130		50.0	47.0	94		16	20	
Chloroform	50.0	53.8	108	80-120		50.0	52.5	105		3	20	
Chloromethane	50.0	57.5	115	67-125		50.0	59.4	119		3	20	
2-Chlorotoluene	50.0	51.6	103	75-125		50.0	49.8	100		3	20	
1,2-Dibromo-3-chloropropane (SIM)	50.0	88.2	176	70-130	*	50.0	86.6	173	*	2	20	
Dibromochloromethane	50.0	65.4	131	70-130	*	50.0	67.1	134	*	2	20	
Dibromomethane	50.0	51.4	103	75-125		50.0	50.7	101		2	20	
1,2-Dichlorobenzene	50.0	51.3	103	70-120		50.0	51.0	102		1	20	
1,3-Dichlorobenzene	50.0	53.0	106	75-125		50.0	52.1	104		2	20	
1,4-Dichlorobenzene	50.0	50.6	101	75-125		50.0	49.6	99		2	20	
Dichlorodifluoromethane	50.0	49.6	99	70-136		50.0	46.8	94		5	20	
1,1-Dichloroethane	50.0	55.6	111	70-130		50.0	53.9	108		3	20	
1,2-Dichloroethane	50.0	46.3	93	70-130		50.0	45.1	90		3	20	
1,1-Dichloroethene	50.0	44.7	89	78-120		50.0	44.7	89		0	20	
cis-1,2-Dichloroethene	50.0	53.7	107	70-125		50.0	51.7	103		4	20	
trans-1,2-Dichloroethene	50.0	47.8	96	70-130		50.0	45.9	92		4	20	
1,2-Dichloropropane	50.0	56.1	112	80-121		50.0	54.6	109		3	20	
cis-1,3-Dichloropropene	50.0	62.8	126	70-130		50.0	62.5	125		1	20	

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Order ID: A08975 Page: 8 of 9 Date: 06/17/22

VM22F15A: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VM22F15A.LCS: 06/15/2022 10):18 [VM22F15A] VM22	2F15A.LCSD: 06/15	/2022 10:46 [V	'M22F15A]								
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Amo	ount			Qualifier	Spike Amoun	t Result	Rec.	Qualifier			Qualifier
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
trans-1,3-Dichloropropene	50.0	69.3	139	70-132	*	50.0	69.0	138	*	1	20	
Ethylbenzene	50.0	52.0	104	80-120		50.0	50.7	101		3	20	
Ethylene Dibromide	50.0	52.1	104	80-120		50.0	52.7	105		1	20	
2-Hexanone	50.0	62.5	125	70-130		50.0	61.3	123		2	20	
Isopropylbenzene	50.0	52.4	105	75-125		50.0	50.7	101		4	20	
4-Methyl-2-pentanone	50.0	84.3	169	70-130	*	50.0	78.4	157	*	7	20	
Methylene Chloride	50.0	55.8	112	70-130		50.0	53.5	107		5	20	
2-Methylnaphthalene	50.0	52.3	105	70-130		50.0	48.6	97		8	20	
MTBE	50.0	51.5	103	70-125		50.0	52.2	104		1	20	
Naphthalene	50.0	48.4	97	70-130		50.0	46.6	93		4	20	
n-Propylbenzene	50.0	53.9	108	70-130		50.0	51.7	103		5	20	
Styrene	50.0	48.0	96	70-130		50.0	46.5	93		3	20	
1,1,1,2-Tetrachloroethane	50.0	63.9	128	80-130		50.0	64.8	130		2	20	
1,1,2,2-Tetrachloroethane	50.0	66.2	132	70-130	*	50.0	66.0	132	*	0	20	
Tetrachloroethene	50.0	47.5	95	70-130		50.0	47.3	95		0	20	
Toluene	50.0	54.0	108	80-120		50.0	51.0	102		6	20	
1,2,4-Trichlorobenzene	50.0	48.7	97	70-130		50.0	46.8	94		3	20	
1,1,1-Trichloroethane	50.0	54.2	108	70-130		50.0	53.4	107		1	20	
1,1,2-Trichloroethane	50.0	51.2	102	75-125		50.0	52.9	106		4	20	
Trichloroethene	50.0	44.5	89	71-125		50.0	44.3	89		0	20	
Trichlorofluoromethane	50.0	51.9	104	70-133		50.0	46.5	93		11	20	
1,2,3-Trichloropropane	50.0	54.4	109	75-125		50.0	53.6	107		2	20	
1,2,3-Trimethylbenzene	50.0	50.8	102	70-130		50.0	50.2	100		2	20	
1,2,4-Trimethylbenzene	50.0	52.1	104	75-130		50.0	50.9	102		2	20	
1,3,5-Trimethylbenzene	50.0	51.6	103	75-130		50.0	49.9	100		3	20	
Vinyl Chloride	50.0	57.1	114	74-125		50.0	52.2	104		9	20	
m&p-Xylene	100	102	102	75-130		100	98.5	98		4	20	
o-Xylene	50.0	51.5	103	80-120		50.0	50.1	100		3	20	
4-Bromofluorobenzene(S)			99	80-120				98				
Dibromofluoromethane(S)			110	80-120				108				
1,2-Dichloroethane-d4(S)			101	80-120				99				
Toluene-d8(S)			105	80-120				102				

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Order ID: A08975 Page: 9 of 9 Date: 06/17/22

Definitions/ Qualifiers:

- U: The analyte was not detected at or above the Reporting Limit (RL).
- *: Value reported is outside QC limits

Exception Summary:

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

Report Generated By:

By Sue Ricketts at 10:02 AM, Jun 17, 2022

lab@fibertec.us



Analytical Laboratory

1914 Holloway Drive Holt, MI 48842

Phone: 517 699 0345

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8660 S. Mackinaw Trail Cadillac, MI 49601

> Phone: 231 775 8368 Fax: 231 775 8584

Geoprobe

11766 E. Grand River Rd. Brighton, MI 48116

Phone: 810 220 3300 Fax: 810 220 3311

Chain of Custody #

203194 PAGE ___ of ___

Client Nar	ne: Arca	dis					PARAMETERS		Matrix Code Deliverables
Contact P	erson: Stac me/Number: 3 2W Miff	cey H 2003 ord	30136112	(CODE)		4		PLE	S Soil GW Ground Water X Level 2 A Air SW Surface Water Level 3 O Oil ww Waste Water Level 4
Email distr	bution list: sto	hn.m	annula@arcads.com cinnis@arcads.com	MATRIX (see right corner for code)	# OF CONTAINERS	8260P		HOLD SAMPLE	P Wipe X Other: Specify EDD
Quote#				SEE RIG	N A	1		=	
Purchase	Order# 30	136112	۷.	TRIX (ρ. O	200			
Date	Time So	ample #	Client Sample Descriptor	A.A.	*	>			Remarks:
6.8	0935		OW-1602 - 060822	GW	3	X			48hr TAT
1	1100	(OW-16 DRI_060822	GW	3	×			48hr TAT
	1110		FIELDBLANK	W	3	K			standard TAT
	1112		QUIPMENT BLANK	W	3	4			standard TAT
1	-		RIPBLANK	W	3	×			Standard TAT
									Received By Lab
						H			10W # 8 1022
									Initials:
Relinquish	Relinquished By: A Ronnwied By: ed By: ed By:	1	around Time ALE RESULTS WILL BE SENT BY THE END us. days3 bus. days	Date	Tim 2	P 7 7	Received By: Received By: Received By: Received By: Fiberte	ec pro	LAB USE ONLY oject number: A08975 Received
3_5	7 bus. days (stand	dard)	Other (specify time/date requirement): _				Temps	eratui	re upon receipt at Lab: 3.40C On Ice
<u> </u>			Pled	ase see	e bo	ack	terms and conditions		



Tuesday, April 12, 2022

Fibertec Project Number:

A07873

Project Identification:

TRW Milford ZF Active Safety (30046730) /30046730

Submittal Date:

04/08/2022

Mrs. Marina Samp Arcadis U.S., Inc. - Novi 28550 Cabot Drive Suite 500 Novi, MI 48377

Dear Mrs. Samp,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

By Sue Ricketts at 1:11 PM, Apr 12, 2022

For Daryl P. Strandbergh Laboratory Director

Enclosures



Order: A07873 Date: 04/12/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Field Blank-040822 Chain of Custody: 207003

Client Project Name: TRW Milford ZF Active Safety Sample No: Collect Date: 04/08/22 (30046730)

Client Project No: 30046730 Sample Matrix: Blank: Field Collect Time: 10:35

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/I	MS			Aliq	uot ID:	A07873-001	Matrix:	Blank: Field		
Method: EPA 5030C/EPA 8260D				Desc	cription:	Field Blank-0408	22			
						Prepar	ation	Ana	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U		μg/L	50	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
3. Benzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
4. Bromobenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
5. Bromochloromethane	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
6. Bromodichloromethane	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
7. Bromoform	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
8. Bromomethane	U		μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
9.2-Butanone	U		μg/L	25	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
10. n-Butylbenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
11. sec-Butylbenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
12. tert-Butylbenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
13. Carbon Disulfide	U		μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
15. Chlorobenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
16. Chloroethane	U		μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
17. Chloroform	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
18. Chloromethane	U	V+	μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
40.0 Ohlamatakana		L+		F.0	1.0	04/11/00	VDOOD44D	04/44/00 40:00	VD00D44D	KOM
19. 2-Chlorotoluene	U		μg/L	5.0	1.0	04/11/22		04/11/22 19:06		
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	04/11/22		04/11/22 19:06		
21. Dibromochloromethane	U		μg/L	5.0	1.0	04/11/22		04/11/22 19:06		
22. Dibromomethane	U		μg/L	5.0	1.0	04/11/22		04/11/22 19:06		
23.1,2-Dichlorobenzene	U		μg/L	1.0	1.0	04/11/22		04/11/22 19:06		
24.1,3-Dichlorobenzene	U		μg/L	1.0	1.0	04/11/22		04/11/22 19:06		
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	04/11/22		04/11/22 19:06		
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	04/11/22		04/11/22 19:06		
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	04/11/22		04/11/22 19:06		
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	04/11/22		04/11/22 19:06		
29.1,1-Dichloroethene	U		μg/L	1.0	1.0	04/11/22		04/11/22 19:06		
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	04/11/22		04/11/22 19:06		
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	04/11/22		04/11/22 19:06		
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	04/11/22		04/11/22 19:06		
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	04/11/22		04/11/22 19:06		
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	04/11/22		04/11/22 19:06		
35. Ethylbenzene	U		μg/L	1.0	1.0	04/11/22		04/11/22 19:06		
36. Ethylene Dibromide	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM

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Order: Date:

A07873 04/12/22

207003 Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Field Blank-040822 Chain of Custody:

Client Project Name: TRW Milford ZF Active Safety 04/08/22 Collect Date: Sample No: (30046730)

Client Project No: 30046730 Sample Matrix: Blank: Field Collect Time: 10:35

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC	C/MS			iquot ID:	A07873-001		Blank: Field		
Method: EPA 5030C/EPA 8260D			De	scription:	Field Blank-040	822			
					Prepa	ration		alysis	
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
37.2-Hexanone	U	μg/L	. 50	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
38. Isopropylbenzene	U	μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
39.4-Methyl-2-pentanone	U	μg/L	. 50	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
40. Methylene Chloride	U	μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
‡ 41.2-Methylnaphthalene	U	μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
42.MTBE	U	μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
43. Naphthalene	U	μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
44. n-Propylbenzene	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
45. Styrene	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
46.1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
47.1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
48. Tetrachloroethene	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
49. Toluene	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
50.1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
‡ 52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
53. Trichloroethene	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
55. 1,2,3-Trichloropropane	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
‡ 56.1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
57.1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
58.1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
59. Vinyl Chloride	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
60. m&p-Xylene	U	μg/L	2.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
61. o-Xylene	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM
‡ 62. Xylenes	U	μg/L	3.0	1.0	04/11/22	VB22D11B	04/11/22 19:06	VB22D11B	KCM



Order: A07873 Date: 04/12/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2-040822 Chain of Custody: 207003

Client Project Name: TRW Milford ZF Active Safety Sample No: Collect Date: 04/08/22

Aliquot ID:

A07873-002

Matrix: Ground Water

(30046730)

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 11:35

Sample Comments:

Volatile Organic Compounds (VOCs) by GC/MS

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Method: EPA 5030C/EPA 8260D				Des	cription:	OW-16D2-040822	!			
						Prepar	ation	An	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U		μg/L	50	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCN
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCN
3. Benzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCN
4. Bromobenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCN
5. Bromochloromethane	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCN
6. Bromodichloromethane	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KC
7. Bromoform	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KC
8. Bromomethane	U		μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCN
9.2-Butanone	U		μg/L	25	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCN
10. n-Butylbenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCN
11. sec-Butylbenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCN
12. tert-Butylbenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KC
13. Carbon Disulfide	U		μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KC
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KC
15. Chlorobenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KC
16. Chloroethane	U		μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KC
17. Chloroform	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KC
18. Chloromethane	U	V+ L+	μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCN
19.2-Chlorotoluene	U		μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KC
20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KC
21. Dibromochloromethane	U		μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KC
22. Dibromomethane	U		μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KC
23.1,2-Dichlorobenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KC
24.1,3-Dichlorobenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KC
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KC
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KC
27.1,1-Dichloroethane	3.5		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KC
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KC
29.1,1-Dichloroethene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KC
30. cis-1,2-Dichloroethene	20		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KC
31. trans-1,2-Dichloroethene	1.5		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KC
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KC
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCI
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KC
35. Ethylbenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCI
36. Ethylene Dibromide	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCN

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Order: A07873 Date: 04/12/22

04/08/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2-040822 Chain of Custody: 207003

Client Project Name: TRW Milford ZF Active Safety Sample No: Collect Date: (30046730)

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 11:35

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/ Method: EPA 5030C/EPA 8260D	MS			•		A07873-002	Matrix: (Ground Water		
Method: EPA 5030C/EPA 8260D				Desc	ription:	OW-16D2-040822	*:	Λ	- l ! -	
Parameter(s)	Result	Q Un	ts Re	porting Limit	Dilution	Prepara P. Date	P. Batch	A. Date	alysis A. Batch	Init.
37.2-Hexanone	U	μg	L	50	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
38. Isopropylbenzene	U	μg	L	5.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
39.4-Methyl-2-pentanone	U	μg	L	50	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
40. Methylene Chloride	U	μg	L	5.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
‡ 41.2-Methylnaphthalene	U	μg	L	5.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
42. MTBE	U	μg	L	5.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
43. Naphthalene	U	μg	L	5.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
44. n-Propylbenzene	U	μg	L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
45. Styrene	U	μg	L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
46. 1,1,1,2-Tetrachloroethane	U	μg	L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
47.1,1,2,2-Tetrachloroethane	U	μg	L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
48. Tetrachloroethene	U	μg	L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
49. Toluene	U	μg	L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
50.1,2,4-Trichlorobenzene	U	μg	L	5.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
51.1,1,1-Trichloroethane	U	μg	L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
‡ 52.1,1,2-Trichloroethane	U	μg	L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
53. Trichloroethene	U	μg	L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
54. Trichlorofluoromethane	U	μg	L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
55. 1,2,3-Trichloropropane	U	μg	L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
‡ 56.1,2,3-Trimethylbenzene	U	μg	L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
57.1,2,4-Trimethylbenzene	U	μg	L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
58.1,3,5-Trimethylbenzene	U	μg	L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
59. Vinyl Chloride	U	μg	L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
60. m&p-Xylene	U	μg	L	2.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
61.o-Xylene	U	μg	L	1.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM
‡ 62. Xylenes	U	μg	L	3.0	1.0	04/11/22	VB22D11B	04/11/22 20:00	VB22D11B	KCM



Aliquot ID:

A07873-003

Order: A07873 Date:

04/08/22

Collect Date:

Matrix: Blank: Trip

04/12/22

Arcadis U.S., Inc. - Novi 207003 Client Identification: Sample Description: Trip Blank Chain of Custody:

TRW Milford ZF Active Safety Client Project Name:

(30046730)

Volatile Organic Compounds (VOCs) by GC/MS

Client Project No: 30046730 Sample Matrix: Blank: Trip Collect Time: NA

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Sample No:

Method: EPA 5030C/EPA 8260D				Des	cription: T	rip Blank				
						Prepa	ration	An	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U		μg/L	50	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
2. Acrylonitrile	U		μg/L	2.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KC
3. Benzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
4. Bromobenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KC
5. Bromochloromethane	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
6. Bromodichloromethane	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
7. Bromoform	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
8. Bromomethane	U		μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
9.2-Butanone	U		μg/L	25	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
10. n-Butylbenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
11. sec-Butylbenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
12. tert-Butylbenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
13. Carbon Disulfide	U		μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
15. Chlorobenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
16. Chloroethane	U		μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
17. Chloroform	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
18. Chloromethane	U	V+ L+	μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
19. 2-Chlorotoluene	U		μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
21. Dibromochloromethane	U		μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
22. Dibromomethane	U		μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
23.1,2-Dichlorobenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
24.1,3-Dichlorobenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
28. 1,2-Dichloroethane	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KC
29. 1,1-Dichloroethene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KC
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KC
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KC
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KC
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KC
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KC
35. Ethylbenzene	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCN
36. Ethylene Dibromide	U		μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCI

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Order: A07873 Date: 04/12/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Trip Blank Chain of Custody: 207003

Client Project Name: TRW Milford ZF Active Safety Sample No: Collect Date: 04/08/22 (30046730)

Client Project No: 30046730 Sample Matrix: Blank: Trip Collect Time: NA

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GO Method: EPA 5030C/EPA 8260D			•	A07873-003 Trip Blank	Matrix: Blank: Trip				
					Prepa	ration	An	alysis	
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
37.2-Hexanone	U	μg/L	50	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
38. Isopropylbenzene	U	μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
39.4-Methyl-2-pentanone	U	μg/L	50	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
40. Methylene Chloride	U	μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
‡ 41.2-Methylnaphthalene	U	μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
42.MTBE	U	μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
43. Naphthalene	U	μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
44. n-Propylbenzene	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
45. Styrene	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
46. 1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
47.1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
48. Tetrachloroethene	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
49. Toluene	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
50. 1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
‡ 52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
53. Trichloroethene	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
55. 1,2,3-Trichloropropane	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
‡ 56.1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
57.1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
58.1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
59. Vinyl Chloride	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
60. m&p-Xylene	U	μg/L	2.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
61.o-Xylene	U	μg/L	1.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM
‡ 62. Xylenes	U	μg/L	3.0	1.0	04/11/22	VB22D11B	04/11/22 19:33	VB22D11B	KCM



Analytical Laboratory Report Laboratory Project Number: A07873

Order: A07873 Date: 04/12/22

Definitions/ Qualifiers:

- **A:** Spike recovery or precision unusable due to dilution.
- B: The analyte was detected in the associated method blank.
- E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
- J: The concentration is an estimated value.
- M: Modified Method
- U: The analyte was not detected at or above the reporting limit.
- X: Matrix Interference has resulted in a raised reporting limit or distorted result.
- W: Results reported on a wet-weight basis.
- *: Value reported is outside QC limits

Exception Summary:

L+ : Recovery in the associated laboratory sample (LCS) exceeds the upper control limit. Results may be biased high.
 V+ : Recovery in the associated continuing calibration verification sample (CCV) exceeds the upper control limit. Results may be biased high.

Analysis Locations:

All analyses performed in Holt.



Accreditation Number(s):

T104704518-19-8 (TX)

lab@fibertec.us



Order ID: A07873 Page: 1 of 5 Date: 04/12/22

VB22D11B: Method Blank (MB)

Run Time: VB22D11B.MB 04/11/2022 17:19	[VB22D11B]	
	MB Result	MB MB RDL
		Qualifier
Analyte	μg/L	μg/L
Acetone	U	50
Acrylonitrile	U	2.0
Benzene	U	1.0
Bromobenzene	U	1.0
Bromochloromethane	U	1.0
Bromodichloromethane	U	1.0
Bromoform	U	1.0
Bromomethane	U	5.0
2-Butanone	U	25
n-Butylbenzene	U	1.0
sec-Butylbenzene	U	1.0
tert-Butylbenzene	U	1.0
Carbon Disulfide	U	5.0
Carbon Tetrachloride	U	1.0
Chlorobenzene	U	1.0
Chloroethane	U	5.0
Chloroform	U	1.0
Chloromethane	U	5.0
2-Chlorotoluene	U	5.0
1,2-Dibromo-3-chloropropane (SIM)	U	1.0
Dibromochloromethane	U	5.0
Dibromomethane	U	5.0
1,2-Dichlorobenzene	U	1.0
1,3-Dichlorobenzene	U	1.0
1,4-Dichlorobenzene	U	1.0
Dichlorodifluoromethane	U	5.0
1,1-Dichloroethane	U	1.0
1,2-Dichloroethane	U	1.0
1,1-Dichloroethene	U	1.0
cis-1,2-Dichloroethene	U	1.0
trans-1,2-Dichloroethene	U	1.0
1,2-Dichloropropane	U	1.0
cis-1,3-Dichloropropene	U	0.50
	1914 Holloway Drive	Holt, MI 48842

DCSID: G-6017.2 (06/10/2020) | lab@fibertec.us | RSN: VB22D11B-221020412131600

T: (810) 220-3300

T: (231) 775-8368

F: (810) 220-3311

F: (231) 775-8584

Brighton, MI 48116

Cadillac, MI 49601

11766 E. Grand River

8660 S. Mackinaw Trail



Order ID: A07873 Page: 2 of 5 Date: 04/12/22

VB22D11B: Method Blank (MB)

Run Time: VB22D11B.MB 04/11/2022	2 17:19 [VB22D11B]		
	MB Result	MB N	IB RDL
		Qualifier	
Analyte	μg/L		ıg/L
trans-1,3-Dichloropropene	U).50
Ethylbenzene	U		.0
Ethylene Dibromide	U		.0
2-Hexanone	U		50
Isopropylbenzene	U		5.0
4-Methyl-2-pentanone	U	5	50
Methylene Chloride	U	5	5.0
2-Methylnaphthalene	U	5	5.0
MTBE	U	5	i.0
Naphthalene	U	5	5.0
n-Propylbenzene	U	1	.0
Styrene	U	1	.0
1,1,1,2-Tetrachloroethane	U	1	.0
1,1,2,2-Tetrachloroethane	U	1	.0
Tetrachloroethene	U	1	.0
Toluene	U	1	.0
1,2,4-Trichlorobenzene	U	5	5.0
1,1,1-Trichloroethane	U	1	.0
1,1,2-Trichloroethane	U	1	.0
Trichloroethene	U	1	.0
Trichlorofluoromethane	U		.0
1,2,3-Trichloropropane	U		.0
1,2,3-Trimethylbenzene	U		.0
1,2,4-Trimethylbenzene	U		.0
1,3,5-Trimethylbenzene	U		.0
Vinyl Chloride	U		.0
m&p-Xylene	U		2.0
o-Xylene	U		.0
4-Bromofluorobenzene(S)	104		.0 30-120
Dibromofluoromethane(S)	105		30-120 30-120
1,2-Dichloroethane-d4(S)	100		30-120 30-120
Toluene-d8(S)	102		30-120 30-120
Totale-do(S)	102		00-120

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order ID: A07873 Page: 3 of 5 Date: 04/12/22

VB22D11B: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VB22D11B.LCS: 04/11/2022 15:31	-		·=	נפווטבצטוו								
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Am	ount			Qualifier	Spike Amoun	t Result	Rec.	Qualifier			Qualifie
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
Acetone	50.0	38.5	77	54-140		50.0	40.0	80		4	20	
Acrylonitrile	50.0	54.7	109	70-130		50.0	54.1	108		1	20	
Benzene	50.0	48.4	97	80-120		50.0	47.1	94		3	20	
Bromobenzene	50.0	45.8	92	75-125		50.0	45.2	90		2	20	
Bromochloromethane	50.0	48.4	97	70-130		50.0	49.1	98		1	20	
Bromodichloromethane	50.0	50.1	100	75-120		50.0	49.1	98		2	20	
Bromoform	50.0	51.9	104	70-130		50.0	51.6	103		1	20	
Bromomethane	50.0	46.6	93	68-135		50.0	45.6	91		2	20	
2-Butanone	50.0	41.0	82	70-148		50.0	41.0	82		0	20	
n-Butylbenzene	50.0	53.9	108	70-133		50.0	52.5	105		3	20	
sec-Butylbenzene	50.0	51.2	102	70-125		50.0	49.4	99		3	20	
ert-Butylbenzene	50.0	49.3	99	70-130		50.0	48.1	96		3	20	
Carbon Disulfide	50.0	48.6	97	70-130		50.0	46.7	93		4	20	
Carbon Tetrachloride	50.0	52.9	106	70-130		50.0	52.4	105		1	20	
Chlorobenzene	50.0	47.8	96	80-120		50.0	46.6	93		3	20	
Chloroethane	50.0	48.1	96	61-130		50.0	46.6	93		3	20	
Chloroform	50.0	48.3	97	80-120		50.0	46.9	94		3	20	
Chloromethane	50.0	71.8	144	67-125	*	50.0	70.0	140	*	3	20	
2-Chlorotoluene	50.0	48.1	96	75-125		50.0	47.3	95		1	20	
1,2-Dibromo-3-chloropropane (SIM)	50.0	47.5	95	70-130		50.0	47.7	95		0	20	
Dibromochloromethane	50.0	48.5	97	70-130		50.0	48.7	97		0	20	
Dibromomethane	50.0	46.5	93	75-125		50.0	45.9	92		1	20	
1,2-Dichlorobenzene	50.0	47.0	94	70-120		50.0	46.6	93		1	20	
1,3-Dichlorobenzene	50.0	47.4	95	75-125		50.0	46.3	93		2	20	
1,4-Dichlorobenzene	50.0	45.3	91	75-125		50.0	44.5	89		2	20	
Dichlorodifluoromethane	50.0	60.4	121	70-136		50.0	57.0	114		6	20	
1,1-Dichloroethane	50.0	48.6	97	70-130		50.0	47.7	95		2	20	
1,2-Dichloroethane	50.0	45.9	92	70-130		50.0	45.3	91		1	20	
1,1-Dichloroethene	50.0	48.3	97	78-120		50.0	46.5	93		4	20	
cis-1,2-Dichloroethene	50.0	50.8	102	70-125		50.0	49.3	99		3	20	
rans-1,2-Dichloroethene	50.0	49.9	100	70-130		50.0	47.8	96		4	20	
1,2-Dichloropropane	50.0	51.0	102	80-121		50.0	50.7	101		1	20	
cis-1,3-Dichloropropene	50.0	49.4	99	70-130		50.0	48.7	97		2	20	

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order ID: A07873 Page: 4 of 5 Date: 04/12/22

VB22D11B: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Am				Qualifier	Spike Amoun		Rec.	Qualifier			Qualifier
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
trans-1,3-Dichloropropene	50.0	53.5	107	70-132		50.0	53.0	106		1	20	
Ethylbenzene	50.0	50.8	102	80-120		50.0	49.2	98		4	20	
Ethylene Dibromide	50.0	49.2	98	80-120		50.0	48.5	97		1	20	
2-Hexanone	50.0	53.4	107	70-130		50.0	53.2	106		1	20	
Isopropylbenzene	50.0	52.0	104	75-125		50.0	50.4	101		3	20	
4-Methyl-2-pentanone	50.0	59.4	119	70-130		50.0	59.4	119		0	20	
Methylene Chloride	50.0	45.0	90	70-130		50.0	43.9	88		2	20	
2-Methylnaphthalene	50.0	46.5	93	70-130		50.0	46.0	92		1	20	
ИТВЕ	50.0	51.4	103	70-125		50.0	51.6	103		0	20	
Naphthalene	50.0	49.5	99	70-130		50.0	49.7	99		0	20	
n-Propylbenzene	50.0	51.7	103	70-130		50.0	50.0	100		3	20	
Styrene	50.0	43.7	87	70-130		50.0	42.8	86		1	20	
,1,1,2-Tetrachloroethane	50.0	50.6	101	80-130		50.0	49.3	99		2	20	
,1,2,2-Tetrachloroethane	50.0	54.5	109	70-130		50.0	55.0	110		1	20	
Tetrachloroethene	50.0	51.6	103	70-130		50.0	48.3	97		6	20	
l'oluene	50.0	51.0	102	80-120		50.0	49.6	99		3	20	
,2,4-Trichlorobenzene	50.0	46.9	94	70-130		50.0	45.8	92		2	20	
,1,1-Trichloroethane	50.0	52.7	105	70-130		50.0	51.0	102		3	20	
,1,2-Trichloroethane	50.0	48.1	96	75-125		50.0	47.2	94		2	20	
richloroethene richloroethene	50.0	46.6	93	71-125		50.0	45.7	91		2	20	
richlorofluoromethane	50.0	48.2	96	70-133		50.0	46.4	93		3	20	
,2,3-Trichloropropane	50.0	46.1	92	75-125		50.0	46.7	93		1	20	
,2,3-Trimethylbenzene	50.0	48.4	97	70-130		50.0	47.3	95		2	20	
,2,4-Trimethylbenzene	50.0	51.5	103	75-130		50.0	50.8	102		1	20	
,3,5-Trimethylbenzene	50.0	51.0	102	75-130		50.0	49.6	99		3	20	
/inyl Chloride	50.0	53.8	108	74-125		50.0	51.4	103		5	20	
n&p-Xylene	100	103	103	75-130		100	100	100		3	20	
-Xylene	50.0	50.9	102	80-120		50.0	49.4	99		3	20	
4-Bromofluorobenzene(S)			105	80-120				104				
Dibromofluoromethane(S)			103	80-120				103				
1,2-Dichloroethane-d4(S)			99	80-120				97				
Toluene-d8(S)			101	80-120				102				

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order ID: A07873 Page: 5 of 5 Date: 04/12/22

Definitions/ Qualifiers:

- U: The analyte was not detected at or above the Reporting Limit (RL).
- *: Value reported is outside QC limits

Exception Summary:

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

Report Generated By:

By Sue Ricketts at 1:19 PM, Apr 12, 2022

RSN: VB22D11B-221020412131600



Analytical Laboratory

1914 Holloway Drive Holt, MI 48842 8660 S. Mackinaw Trail Cadillac, MI 49601 Phone: 231 775 8368

Phone: 517 699 0345 Fax: 517 699 0388 email: lab@fibertec.us

Fax: 231 775 8584

Geoprobe

11766 E. Grand River Rd. Brighton, MI 48116

Phone: 810 220 3300 Fax: 810 220 3311 Chain of Custody #

207003 PAGE ____ of ____

Client Nar	ne: Avco	idis							PARAM	TERS			Matrix Code Deliverables
Contact P	erson: Mo	urina S	Samp										S Soil GW Ground Water Level 2
TOW	me/Number	rd	30046730	CODE		200						PLE	A Air Sw Surface Water Level 3 O Oil ww Waste Water Level 4
Email distri	ibution list: Drina . 50	Squx Cinnis	arcadis.com s@arcadis.com	MATRIX (SEE RIGHT CORNER FOR CODE)	VERS	82603			14			HOLD SAMPLE	P Wipe X Other: Specify EDD
Quote#				EE RIGH	# OF CONTAINERS	П						Ĭ	
Purchase	Order# 3	00467	30.00012	RIX (S	8	400		1 1					
Date	Time	Sample #		MAT	0 #	3							Remarks:
4.8.2	1035		FIELPBLANK-040822	6W	3	3							
	1135		W-16D2_0406224	GW	-	3							
V			EQUIPMENT BLANK-040822	GW	3	3							
			TRIPBLANK		3	3							100
													Received By Lab
-													APR 0.8 2022
													0.1
													Initials: 10
Comment	ts:		,										
									127			1	1.6
Sampled/	Relinquished Hocey	Hann	rola	Date	/ Tim	1e	1	240	Recei	ed By:	NX	1	ATT
Relinquish	ed By:	1	#		e/ Tim			10	Recei	Ву:	/		
Relinquish	rons	XX	M	Date	A Time				- Fr	1		. 12	Shaper 4/8/22 4:3
Kelinquish	egey.	1	M	7/	3/	22	- 12	SAL	2	The t	aborton	in	
1	a hour	Tu	Unaround Time ALL-RESULTS WILL BE SENT BY THE END OF	THE B	UŚINE	ESS DA	AY			0	100		LAB USE ONLY
1	bus. day	× 2	bus. days3 bus. days	_	4 }	bus, c	lays				Fiberte	ec pro	oject number: 7873
<u>, 5-7</u>	7 bus. days (st	andard)	Other (specify time/date requirement):					-			Temp	eratur	re upon receipt at Lab: 5. Yac ica
			Please	e see	e bo	ack	for t	erms c	and cor	nditio	ns		



Wednesday, April 20, 2022

Fibertec Project Number:

A08019

Project Identification:

TRW Milford (30046730) /30046730

Submittal Date:

04/18/2022

Mr. John McInnis Arcadis U.S., Inc. - Novi 28550 Cabot Drive Suite 500 Novi, MI 48377

Dear Mr. McInnis,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

By Sue Ricketts at 12:45 PM, Apr 20, 2022

For Daryl P. Strandbergh Laboratory Director

Enclosures



Order: A0 Date: 04

A08019 04/20/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: FIELD BLANK-041822 Chain of Custody: 207305

Client Project Name: TRW Milford (30046730) Sample No: Collect Date: 04/18/22

Client Project No: 30046730 Sample Matrix: Blank: Field Collect Time: 10:35

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS	Aliquot ID:	A08019-001	Matrix: Blank: Field
Method: EPA 5030C/EPA 8260D	Description:	FIELD BLANK-04182	22

						Prepa			alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init
1. Acetone	U	L-	μg/L	50	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BR
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BR
3. Benzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BR
4. Bromobenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BR
5. Bromochloromethane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BR
6. Bromodichloromethane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BR
7. Bromoform	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BR
8. Bromomethane	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BR
9.2-Butanone	U		μg/L	25	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BR
10. n-Butylbenzene	U	V+	μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BR
11. sec-Butylbenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BR
12. tert-Butylbenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BR
13. Carbon Disulfide	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BR
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BF
15. Chlorobenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BF
16. Chloroethane	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BF
17. Chloroform	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BF
18. Chloromethane	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BF
19.2-Chlorotoluene	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BF
20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BF
21. Dibromochloromethane	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	В
22. Dibromomethane	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	В
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BF
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BF
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BF
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BF
27. 1,1-Dichloroethane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BF
28. 1,2-Dichloroethane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BF
29. 1,1-Dichloroethene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BF
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BF
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BF
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	В
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BF
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BF
35. Ethylbenzene	U		μg/L	1.0	1.0	04/19/22		04/19/22 13:08		
36. Ethylene Dibromide	U		μg/L	1.0	1.0	04/19/22		04/19/22 13:08		
37.2-Hexanone	U		μg/L	50	1.0	04/19/22		04/19/22 13:08		
			1.9					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order: A08019 Date: 04/20/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: FIELD BLANK-041822 Chain of Custody: 207305

Client Project Name: TRW Milford (30046730) Sample No: Collect Date: 04/18/22

Client Project No: 30046730 Sample Matrix: Blank: Field Collect Time: 10:35

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/M	//S			Aliq	uot ID:	A08019-001	Matrix:	Blank: Field		
Method: EPA 5030C/EPA 8260D				Des	cription:	FIELD BLANK-0418	322			
						Preparati	on	An	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
38. Isopropylbenzene	U		μg/L	5.0	1.0	04/19/22 V	/B22D19A	04/19/22 13:08	VB22D19A	BRC
39.4-Methyl-2-pentanone	U		μg/L	50	1.0	04/19/22 V	/B22D19A	04/19/22 13:08	VB22D19A	BRC

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
38. Isopropylbenzene	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
39. 4-Methyl-2-pentanone	U		μg/L	50	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
40. Methylene Chloride	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
‡ 41.2-Methylnaphthalene	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
42. MTBE	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
43. Naphthalene	U	V+ L+	μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
44. n-Propylbenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
45. Styrene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
46.1,1,1,2-Tetrachloroethane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
47.1,1,2,2-Tetrachloroethane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
48. Tetrachloroethene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
49. Toluene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
50.1,2,4-Trichlorobenzene	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
51.1,1,1-Trichloroethane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
‡ 52.1,1,2-Trichloroethane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
53. Trichloroethene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
54. Trichlorofluoromethane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
55.1,2,3-Trichloropropane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
‡ 56.1,2,3-Trimethylbenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
57.1,2,4-Trimethylbenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
58.1,3,5-Trimethylbenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
59. Vinyl Chloride	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
60. m&p-Xylene	U		μg/L	2.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
61. o-Xylene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC
‡ 62. Xylenes	U		μg/L	3.0	1.0	04/19/22	VB22D19A	04/19/22 13:08	VB22D19A	BRC



Order: A08019 Date: 04/20/22

Matrix: Blank: Equipment

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: EQUIPMENT BLANK-041822 Chain of Custody: 207305

Client Project Name: TRW Milford (30046730) Sample No: Collect Date: 04/18/22

Aliquot ID:

A08019-002

Description: EQUIPMENT BLANK-041822

Client Project No: 30046730 Sample Matrix: Blank: Equipment Collect Time: 11:20

Sample Comments:

Volatile Organic Compounds (VOCs) by GC/MS

Method: EPA 5030C/EPA 8260D

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

						Prepa			alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U	L-	μg/L	50	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRO
2. Acrylonitrile	U		μg/L	2.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRO
3. Benzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRO
4. Bromobenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRO
5. Bromochloromethane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRO
6. Bromodichloromethane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BR
7. Bromoform	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BR
8. Bromomethane	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BR
9.2-Butanone	U		μg/L	25	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BR
10. n-Butylbenzene	U	V+	μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BR
11. sec-Butylbenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BR
12. tert-Butylbenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BR
13. Carbon Disulfide	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BR
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BR
15. Chlorobenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BR
16. Chloroethane	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BR
17. Chloroform	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BR
18. Chloromethane	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BR
19.2-Chlorotoluene	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BR
20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BR
21. Dibromochloromethane	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BR
22. Dibromomethane	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BR
23.1,2-Dichlorobenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BR
24.1,3-Dichlorobenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BR
25.1,4-Dichlorobenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BR
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BR
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BR
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BR
29.1,1-Dichloroethene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BR
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BR
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BR
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BR
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BR

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601

μg/L

 $\mu g/L$

μg/L

 $\mu g/L$

U

U

U

U

T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368

1.0

1.0

1.0

1.0

04/19/22

04/19/22

04/19/22

04/19/22

F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584

VB22D19A 04/19/22 13:35 VB22D19A BRC

VB22D19A 04/19/22 13:35 VB22D19A BRC

VB22D19A 04/19/22 13:35 VB22D19A BRC

VB22D19A 04/19/22 13:35 VB22D19A BRC

34. trans-1,3-Dichloropropene

35. Ethylbenzene

37.2-Hexanone

36. Ethylene Dibromide

0.50

1.0

1.0

50



Order: A08019 Date: 04/20/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: EQUIPMENT BLANK-041822 Chain of Custody: 207305

Client Project Name: TRW Milford (30046730) Sample No: Collect Date: 04/18/22

Client Project No: 30046730 Sample Matrix: Blank: Equipment Collect Time: 11:20

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/M	IS			Aliq	uot ID:	A08019-002	Matrix:	Blank: Equipme	nt	
Method: EPA 5030C/EPA 8260D				Des	cription:	EQUIPMENT BLA	NK-041822			
						Prepar	ation	An	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
38. Isopropylbenzene	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC
39.4-Methyl-2-pentanone	U		μg/L	50	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC
40. Methylene Chloride	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC
‡ 41.2-Methylnaphthalene	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC
42. MTBE	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC
43. Naphthalene	U	V+ L+	μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC
44. n-Propylbenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC
45. Styrene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC
46.1,1,1,2-Tetrachloroethane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC
47.1,1,2,2-Tetrachloroethane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC
48. Tetrachloroethene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC
49. Toluene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC
50.1,2,4-Trichlorobenzene	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC
51.1,1,1-Trichloroethane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC
‡ 52.1,1,2-Trichloroethane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC
53. Trichloroethene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC
54. Trichlorofluoromethane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC
55.1,2,3-Trichloropropane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC
‡ 56.1,2,3-Trimethylbenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC
57.1,2,4-Trimethylbenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC
58.1,3,5-Trimethylbenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC
59. Vinyl Chloride	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC
60. m&p-Xylene	U		μg/L	2.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC
61. o-Xylene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC
‡ 62. Xylenes	U		μg/L	3.0	1.0	04/19/22	VB22D19A	04/19/22 13:35	VB22D19A	BRC



Order: A08019 Date: 04/20/22

Matrix: Ground Water

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2-041822 Chain of Custody: 207305

Client Project Name: TRW Milford (30046730) Sample No: Collect Date: 04/18/22

Aliquot ID:

A08019-003

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 10:55

Sample Comments:

Volatile Organic Compounds (VOCs) by GC/MS

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Method: EPA 5030C/EPA 8260D Parameter(s) Result Q 1. Acetone U L- ‡ 2. Acrylonitrile U 3. Benzene U 4. Bromobenzene U 5. Bromochloromethane U 6. Bromodichloromethane U 7. Bromoform U 8. Bromomethane U 9. 2-Butanone U 10. n-Butylbenzene U 11. sec-Butylbenzene U 12. tert-Butylbenzene U 13. Carbon Disulfide U 14. Carbon Tetrachloride U 15. Chlorobenzene U 16. Chloroethane U 17. Chloroform U 18. Chloromethane U 19. 2-Chlorotoluene U ‡ 20. 1,2-Dibromo-3-chloropropane (SIM) U	Units µg/L µg/L µg/L	Reporting Limit 50 2.0	Dilution	Prepara P. Date		Ana	alveie	
1. Acetone U L- ‡ 2. Acrylonitrile U 3. Benzene U 4. Bromobenzene U 5. Bromochloromethane U 6. Bromodichloromethane U 7. Bromoform U 8. Bromomethane U 9. 2-Butanone U 10. n-Butylbenzene U 11. sec-Butylbenzene U 12. tert-Butylbenzene U 13. Carbon Disulfide U 14. Carbon Tetrachloride U 15. Chlorobenzene U 16. Chloroethane U 17. Chloroform U 18. Chloromethane U 19. 2-Chlorotoluene U	μg/L μg/L	50				Ana	lveie	
1. Acetone U L- ‡ 2. Acrylonitrile U 3. Benzene U 4. Bromobenzene U 5. Bromochloromethane U 6. Bromodichloromethane U 7. Bromoform U 8. Bromomethane U 9. 2-Butanone U 10. n-Butylbenzene U 11. sec-Butylbenzene U 12. tert-Butylbenzene U 13. Carbon Disulfide U 14. Carbon Tetrachloride U 15. Chlorobenzene U 16. Chloroethane U 17. Chloroform U 18. Chloromethane U 19. 2-Chlorotoluene U	μg/L μg/L	50		P Date				
‡ 2. Acrylonitrile U 3. Benzene U 4. Bromobenzene U 5. Bromochloromethane U 6. Bromodichloromethane U 7. Bromoform U 8. Bromomethane U 9. 2-Butanone U 10. n-Butylbenzene U 11. sec-Butylbenzene U 12. tert-Butylbenzene U 13. Carbon Disulfide U 14. Carbon Tetrachloride U 15. Chlorobenzene U 16. Chloroethane U 17. Chloroform U 18. Chloromethane U 19. 2-Chlorotoluene U	μg/L			1. Βαισ	P. Batch	A. Date	A. Batch	Init.
3. Benzene U 4. Bromobenzene U 5. Bromochloromethane U 6. Bromodichloromethane U 7. Bromoform U 8. Bromomethane U 9. 2-Butanone U 10. n-Butylbenzene U 11. sec-Butylbenzene U 12. tert-Butylbenzene U 13. Carbon Disulfide U 14. Carbon Tetrachloride U 15. Chlorobenzene U 16. Chloroethane U 17. Chloroform U 18. Chloromethane U 19. 2-Chlorotoluene U		2.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
4. Bromobenzene U 5. Bromochloromethane U 6. Bromodichloromethane U 7. Bromoform U 8. Bromomethane U 9. 2-Butanone U 10. n-Butylbenzene U 11. sec-Butylbenzene U 12. tert-Butylbenzene U 13. Carbon Disulfide U 14. Carbon Tetrachloride U 15. Chlorobenzene U 16. Chloroethane U 17. Chloroform U 18. Chloromethane U 19. 2-Chlorotoluene U	μg/L		1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
5. Bromochloromethane U 6. Bromodichloromethane U 7. Bromoform U 8. Bromomethane U 9. 2-Butanone U 10. n-Butylbenzene U 11. sec-Butylbenzene U 12. tert-Butylbenzene U 13. Carbon Disulfide U 14. Carbon Tetrachloride U 15. Chlorobenzene U 16. Chloroethane U 17. Chloroform U 18. Chloromethane U 19. 2-Chlorotoluene U		1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
6. Bromodichloromethane U 7. Bromoform U 8. Bromomethane U 9. 2-Butanone U 10. n-Butylbenzene U 11. sec-Butylbenzene U 12. tert-Butylbenzene U 13. Carbon Disulfide U 14. Carbon Tetrachloride U 15. Chlorobenzene U 16. Chloroethane U 17. Chloroform U 18. Chloromethane U 19. 2-Chlorotoluene U	μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
7. Bromoform U 8. Bromomethane U 9.2-Butanone U 10. n-Butylbenzene U 11. sec-Butylbenzene U 12. tert-Butylbenzene U 13. Carbon Disulfide U 14. Carbon Tetrachloride U 15. Chlorobenzene U 16. Chloroethane U 17. Chloroform U 18. Chloromethane U 19. 2-Chlorotoluene U	μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
8. Bromomethane U 9. 2-Butanone U 10. n-Butylbenzene U V+ 11. sec-Butylbenzene U 12. tert-Butylbenzene U 13. Carbon Disulfide U 14. Carbon Tetrachloride U 15. Chlorobenzene U 16. Chloroethane U 17. Chloroform U 18. Chloromethane U 19. 2-Chlorotoluene U	μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
9. 2-Butanone U 10. n-Butylbenzene U V+ 11. sec-Butylbenzene U 12. tert-Butylbenzene U 13. Carbon Disulfide U 14. Carbon Tetrachloride U 15. Chlorobenzene U 16. Chloroethane U 17. Chloroform U 18. Chloromethane U 19. 2-Chlorotoluene U	μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
10. n-Butylbenzene U V+ 11. sec-Butylbenzene U 12. tert-Butylbenzene U 13. Carbon Disulfide U 14. Carbon Tetrachloride U 15. Chlorobenzene U 16. Chloroethane U 17. Chloroform U 18. Chloromethane U 19. 2-Chlorotoluene U	μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
11. sec-Butylbenzene U 12. tert-Butylbenzene U 13. Carbon Disulfide U 14. Carbon Tetrachloride U 15. Chlorobenzene U 16. Chloroethane U 17. Chloroform U 18. Chloromethane U 19. 2-Chlorotoluene U	μg/L	25	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
12. tert-Butylbenzene U 13. Carbon Disulfide U 14. Carbon Tetrachloride U 15. Chlorobenzene U 16. Chloroethane U 17. Chloroform U 18. Chloromethane U 19. 2-Chlorotoluene U	μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
13. Carbon Disulfide U 14. Carbon Tetrachloride U 15. Chlorobenzene U 16. Chloroethane U 17. Chloroform U 18. Chloromethane U 19. 2-Chlorotoluene U	μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
14. Carbon TetrachlorideU15. ChlorobenzeneU16. ChloroethaneU17. ChloroformU18. ChloromethaneU19. 2-ChlorotolueneU	μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
15. Chlorobenzene U 16. Chloroethane U 17. Chloroform U 18. Chloromethane U 19. 2-Chlorotoluene U	μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
16. Chloroethane U 17. Chloroform U 18. Chloromethane U 19. 2-Chlorotoluene U	μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
17. Chloroform U 18. Chloromethane U 19. 2-Chlorotoluene U	μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
18. Chloromethane U 19. 2-Chlorotoluene U	μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
19.2-Chlorotoluene U	μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
	μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
‡ 20.1,2-Dibromo-3-chloropropane (SIM) U	μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
	μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
21. Dibromochloromethane U	μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
22. Dibromomethane U	μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
23.1,2-Dichlorobenzene U	μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
24. 1,3-Dichlorobenzene U	μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
25.1,4-Dichlorobenzene U	μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
26. Dichlorodifluoromethane U	μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
27.1,1-Dichloroethane 3.0	μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
28.1,2-Dichloroethane U	μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
29.1,1-Dichloroethene U	μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
30. cis-1,2-Dichloroethene 18	μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
31. trans-1,2-Dichloroethene 1.3	μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
32.1,2-Dichloropropane U	μg/L	1.0	1.0	04/19/22		04/19/22 14:02		
33. cis-1,3-Dichloropropene U	μg/L	0.50	1.0	04/19/22		04/19/22 14:02		
34. trans-1,3-Dichloropropene U	μg/L	0.50	1.0	04/19/22		04/19/22 14:02		
35. Ethylbenzene U	μg/L	1.0	1.0	04/19/22		04/19/22 14:02		
36. Ethylene Dibromide U	μg/L	1.0	1.0	04/19/22		04/19/22 14:02		
37.2-Hexanone U	μg/L	50	1.0	04/19/22		04/19/22 14:02		

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order: A08019 04/20/22 Date:

207305 Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2-041822 Chain of Custody:

Client Project Name: TRW Milford (30046730) 04/18/22 Collect Date: Sample No:

Client Project No: 30046730 Sample Matrix: **Ground Water** Collect Time: 10:55

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable #: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by Method: EPA 5030C/EPA 8260D	GC/MS			•	uot ID:	A08019-003 OW-16D2-041822		Ground Water		
metriod. El A 30300/El A 3230D					oription.			Λm		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prepara P. Date	P. Batch	A. Date	alysis A. Batch	Init.
38. Isopropylbenzene	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
39.4-Methyl-2-pentanone	U		μg/L	50	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
40. Methylene Chloride	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
‡ 41.2-Methylnaphthalene	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
42. MTBE	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
43. Naphthalene	U	V+ L+	μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
44. n-Propylbenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
45. Styrene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
46.1,1,1,2-Tetrachloroethane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
47.1,1,2,2-Tetrachloroethane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
48. Tetrachloroethene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
49. Toluene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
50.1,2,4-Trichlorobenzene	U		μg/L	5.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
51.1,1,1-Trichloroethane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
‡ 52.1,1,2-Trichloroethane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
53. Trichloroethene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
54. Trichlorofluoromethane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
55.1,2,3-Trichloropropane	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
‡ 56.1,2,3-Trimethylbenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
57.1,2,4-Trimethylbenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
58.1,3,5-Trimethylbenzene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
59. Vinyl Chloride	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
60. m&p-Xylene	U		μg/L	2.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
61. o-Xylene	U		μg/L	1.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC
‡ 62. Xylenes	U		μg/L	3.0	1.0	04/19/22	VB22D19A	04/19/22 14:02	VB22D19A	BRC



Analytical Laboratory Report Laboratory Project Number: A08019

Order: A08019 Date: 04/20/22

Definitions/ Qualifiers:

- A: Spike recovery or precision unusable due to dilution.
- B: The analyte was detected in the associated method blank.
- E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
- J: The concentration is an estimated value.
- M: Modified Method
- U: The analyte was not detected at or above the reporting limit.
- X: Matrix Interference has resulted in a raised reporting limit or distorted result.
- W: Results reported on a wet-weight basis.
- *: Value reported is outside QC limits

Exception Summary:

L- : Recovery in the associated laboratory sample (LCS) exceeds the lower control limit. Results may be biased low.
 L+ : Recovery in the associated laboratory sample (LCS) exceeds the upper control limit. Results may be biased high.
 V+ : Recovery in the associated continuing calibration verification sample (CCV) exceeds the upper control limit. Results may be biased high.

Analysis Locations:

All analyses performed in Holt.



Accreditation Number(s):

T104704518-19-8 (TX)



Order ID: A08019 Page: 1 of 5 Date: 04/20/22

VB22D19A: Method Blank (MB)

Run Time: VB22D19A.MB 04/19/2022 11		
	MB Result	MB MB RDL
		Qualifier
Analyte	μg/L	μg/L
Acetone	U	50
Acrylonitrile	U	2.0
Benzene	U	1.0
Bromobenzene	U	1.0
Bromochloromethane	U	1.0
Bromodichloromethane	U	1.0
Bromoform	U	1.0
Bromomethane	U	5.0
2-Butanone	U	25
n-Butylbenzene	U	1.0
sec-Butylbenzene	U	1.0
tert-Butylbenzene	U	1.0
Carbon Disulfide	U	5.0
Carbon Tetrachloride	U	1.0
Chlorobenzene	U	1.0
Chloroethane	U	5.0
Chloroform	U	1.0
Chloromethane	U	5.0
2-Chlorotoluene	U	5.0
1,2-Dibromo-3-chloropropane (SIM)	U	1.0
Dibromochloromethane	U	5.0
Dibromomethane	U	5.0
1,2-Dichlorobenzene	U	1.0
1,3-Dichlorobenzene	U	1.0
1,4-Dichlorobenzene	U	1.0
Dichlorodifluoromethane	U	5.0
1,1-Dichloroethane	U	1.0
1,2-Dichloroethane	U	1.0
1,1-Dichloroethene	U	1.0
cis-1,2-Dichloroethene	U	1.0
trans-1,2-Dichloroethene	U	1.0
1,2-Dichloropropane	U	1.0
cis-1,3-Dichloropropene	U	0.50
	1914 Holloway Drive	Holt, MI 48842

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F: (231) 775-8584

Brighton, MI 48116

Cadillac, MI 49601

11766 E. Grand River

8660 S. Mackinaw Trail



Order ID: A08019 Page: 2 of 5 Date: 04/20/22

VB22D19A: Method Blank (MB)

Run Time: VB22D19A.MB 04/19/2022 11:47 [V	/B22D19A]		
	MB Result	MB	MB RDL
		Qualifier	
Analyte	μg/L		μg/L
trans-1,3-Dichloropropene	U		0.50
Ethylbenzene	U		1.0
Ethylene Dibromide	U		1.0
2-Hexanone	U		50
Isopropylbenzene	U		5.0
4-Methyl-2-pentanone	U		50
Methylene Chloride	U		5.0
2-Methylnaphthalene	U		5.0
MTBE	U		5.0
Naphthalene	U		5.0
n-Propylbenzene	U		1.0
Styrene	U		1.0
1,1,2-Tetrachloroethane	U		1.0
1,1,2,2-Tetrachloroethane	U		1.0
Tetrachloroethene	U		1.0
Toluene	U		1.0
1,2,4-Trichlorobenzene	U		5.0
1,1,1-Trichloroethane	U		1.0
1,1,2-Trichloroethane	U		1.0
Trichloroethene	U		1.0
Trichlorofluoromethane	U		1.0
1,2,3-Trichloropropane	U		1.0
1,2,3-Trientoopropane	U		1.0
1,2,4-Trimethylbenzene	U		1.0
1,3,5-Trimethylbenzene	U		1.0
Vinyl Chloride	U		1.0
m&p-Xylene	U		2.0
o-Xylene	U		1.0
4-Bromofluorobenzene(S)	99		80-120
Dibromofluoromethane(S)	101		80-120
	100		80-120
1,2-Dichloroethane-d4(S) Toluene-d8(S)	100 100		80-120

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order ID: A08019 Page: 3 of 5 Date: 04/20/22

VB22D19A: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VB22D19A.LCS: 04/19/2022 10:27	7 [VB22D19A] VB22	D19A.LCSD: 04/1	9/2022 10:54 [\	/B22D19A]								
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Am	ount			Qualifier	Spike Amo		Rec.	Qualifier			Qualifier
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
Acetone	50.0	23.4	47	54-140	*	50.0	22.4	45	*	4	20	
Acrylonitrile	50.0	55.1	110	70-130		50.0	56.3	113		3	20	
Benzene	50.0	49.1	98	80-120		50.0	48.2	96		2	20	
Bromobenzene	50.0	50.2	100	75-125		50.0	49.3	99		1	20	
Bromochloromethane	50.0	49.3	99	70-130		50.0	48.7	97		2	20	
Bromodichloromethane	50.0	52.1	104	75-120		50.0	51.3	103		1	20	
Bromoform	50.0	51.1	102	70-130		50.0	51.8	104		2	20	
Bromomethane	50.0	49.3	99	68-135		50.0	47.9	96		3	20	
2-Butanone	50.0	38.2	76	70-148		50.0	39.1	78		3	20	
n-Butylbenzene	50.0	61.4	123	70-133		50.0	57.7	115		7	20	
sec-Butylbenzene	50.0	55.3	111	70-125		50.0	52.8	106		5	20	
tert-Butylbenzene	50.0	54.6	109	70-130		50.0	52.6	105		4	20	
Carbon Disulfide	50.0	43.7	87	70-130		50.0	41.9	84		4	20	
Carbon Tetrachloride	50.0	48.0	96	70-130		50.0	48.2	96		0	20	
Chlorobenzene	50.0	50.5	101	80-120		50.0	49.7	99		2	20	
Chloroethane	50.0	45.4	91	61-130		50.0	44.0	88		3	20	
Chloroform	50.0	48.1	96	80-120		50.0	48.5	97		1	20	
Chloromethane	50.0	51.3	103	67-125		50.0	50.2	100		3	20	
2-Chlorotoluene	50.0	53.2	106	75-125		50.0	51.3	103		3	20	
1,2-Dibromo-3-chloropropane (SIM)	50.0	56.4	113	70-130		50.0	56.9	114		1	20	
Dibromochloromethane	50.0	51.4	103	70-130		50.0	51.9	104		1	20	
Dibromomethane	50.0	49.7	99	75-125		50.0	50.3	101		2	20	
1,2-Dichlorobenzene	50.0	53.0	106	70-120		50.0	51.4	103		3	20	
1,3-Dichlorobenzene	50.0	52.6	105	75-125		50.0	51.4	103		2	20	
1,4-Dichlorobenzene	50.0	49.3	99	75-125		50.0	48.1	96		3	20	
Dichlorodifluoromethane	50.0	54.0	108	70-136		50.0	52.4	105		3	20	
1,1-Dichloroethane	50.0	49.9	100	70-130		50.0	49.2	98		2	20	
1,2-Dichloroethane	50.0	47.3	95	70-130		50.0	47.5	95		0	20	
1,1-Dichloroethene	50.0	45.2	90	78-120		50.0	43.5	87		3	20	
cis-1,2-Dichloroethene	50.0	50.3	101	70-125		50.0	50.2	100		1	20	
trans-1,2-Dichloroethene	50.0	48.2	96	70-130		50.0	47.2	94		2	20	
1,2-Dichloropropane	50.0	52.5	105	80-121		50.0	52.1	104		1	20	
cis-1,3-Dichloropropene	50.0	54.6	109	70-130		50.0	53.9	108		1	20	
	101411 11 1		11 1: 141 400					F (547) 600 020				

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Order ID: A08019 Page: 4 of 5 Date: 04/20/22

VB22D19A: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VB22D19A.LCS: 04/19/2022 10):27 [VB22D19A] VB22	2D19A.LCSD: 04/19	/2022 10:54 [V	B22D19A]								
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Am	ount			Qualifier	Spike Amoun	t Result	Rec.	Qualifier			Qualifier
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
trans-1,3-Dichloropropene	50.0	58.3	117	70-132		50.0	57.7	115		2	20	
Ethylbenzene	50.0	52.2	104	80-120		50.0	51.0	102		2	20	
Ethylene Dibromide	50.0	53.9	108	80-120		50.0	54.1	108		0	20	
2-Hexanone	50.0	39.6	79	70-130		50.0	39.0	78		1	20	
Isopropylbenzene	50.0	54.4	109	75-125		50.0	53.3	107		2	20	
4-Methyl-2-pentanone	50.0	57.3	115	70-130		50.0	58.2	116		1	20	
Methylene Chloride	50.0	42.2	84	70-130		50.0	35.1	70		18	20	
2-Methylnaphthalene	50.0	62.1	124	70-130		50.0	58.1	116		7	20	
MTBE	50.0	52.6	105	70-125		50.0	53.6	107		2	20	
Naphthalene	50.0	68.2	136	70-130	*	50.0	66.9	134	*	1	20	
n-Propylbenzene	50.0	53.9	108	70-130		50.0	52.0	104		4	20	
Styrene	50.0	49.5	99	70-130		50.0	49.1	98		1	20	
1,1,1,2-Tetrachloroethane	50.0	52.6	105	80-130		50.0	52.2	104		1	20	
1,1,2,2-Tetrachloroethane	50.0	61.9	124	70-130		50.0	62.5	125		1	20	
Tetrachloroethene	50.0	50.6	101	70-130		50.0	49.4	99		2	20	
Toluene	50.0	50.2	100	80-120		50.0	49.2	98		2	20	
1,2,4-Trichlorobenzene	50.0	59.2	118	70-130		50.0	57.8	116		2	20	
1,1,1-Trichloroethane	50.0	50.4	101	70-130		50.0	49.4	99		2	20	
1,1,2-Trichloroethane	50.0	52.4	105	75-125		50.0	52.3	105		0	20	
Trichloroethene	50.0	45.6	91	71-125		50.0	44.8	90		1	20	
Trichlorofluoromethane	50.0	51.7	103	70-133		50.0	48.8	98		5	20	
1,2,3-Trichloropropane	50.0	53.5	107	75-125		50.0	53.4	107		0	20	
1,2,3-Trimethylbenzene	50.0	53.1	106	70-130		50.0	51.7	103		3	20	
1,2,4-Trimethylbenzene	50.0	58.0	116	75-130		50.0	56.0	112		4	20	
1,3,5-Trimethylbenzene	50.0	55.3	111	75-130		50.0	53.5	107		4	20	
Vinyl Chloride	50.0	51.3	103	74-125		50.0	49.3	99		4	20	
n&p-Xylene	100	107	107	75-130		100	104	104		3	20	
o-Xylene	50.0	53.6	107	80-120		50.0	52.9	106		1	20	
4-Bromofluorobenzene(S)			100	80-120				101				
Dibromofluoromethane(S)			99	80-120				100				
1,2-Dichloroethane-d4(S)			104	80-120				104				
Toluene-d8(S)			100	80-120				100				

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Order ID: A08019 Page: 5 of 5 Date: 04/20/22

Definitions/ Qualifiers:

- U: The analyte was not detected at or above the Reporting Limit (RL).
- *: Value reported is outside QC limits

Exception Summary:

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

Report Generated By:

By Sue Ricketts at 12:52 PM, Apr 20, 2022

RSN: VB22D19A-221100420124953

FiberteC environmental services

Analytical Laboratory

1914 Holloway Drive Holt, MI 48842

Phone: 517 699 0345 Fax: 517 699 0388

email: lab@fibertec.us

loway Drive 8660 S. Mackinaw Trail

Cadillac, MI 49601 Phone: 231 775 8368

Fax: 231 775 8584

Geoprobe

11766 E. Grand River Rd.

Brighton, MI 48116 Phone: 810 220 3300 Fax: 810 220 3311 Chain of Custody # 207305
PAGE of

Client Name: AVCACAS PARAMETERS Matrix Code Deliverables Contact Person: Stacy Hannula GW Ground Water Level 2 Project Name/ Number: 300H67310 sw Surface Water Level 3 ww Waste Water Level 4 O Oil HOLD SAMPLE Email distribution list: warina. sampo arcadis, com EDD X Other: Specify # OF CONTAINERS john mainnis @ arcadis. com Quote# 200 30046730.00012 Purchase Order# Sample # Client Sample Descriptor Remarks: Time 6W 3 3 FIELDBLANK 641822 EQUIPMENTBLANK-041822 6W 3 1120 sample time 6W 3 3 OW-16D2-641822 E TRIPBLANK Comments: 144.18.22 12:10 LAB USE ONLY Fibertec project number: A08019 3 bus, days 4 bus, days 1 bus, day Temperature upon receipt at Lab: 31 °C Other (specify time/date requirement): _ _5-7 bus, days (standard) Please see back for terms and conditions



Thursday, July 14, 2022

Fibertec Project Number: A09642

Project Identification: TRW Milford (30136112) /30136112

Submittal Date: 07/11/2022

Ms. Stacey Hannula Arcadis U.S., Inc. - Novi 28550 Cabot Drive Suite 500 Novi, MI 48377

Dear Ms. Hannula,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

Bailey WUCh
By Bailey Welch at 2:53 PM, Jul 14, 2022

For Daryl P. Strandbergh Laboratory Director

Enclosures

Page:



Order: A09642 Date: 07/14/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2_071122 Chain of Custody: 205973

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 07/11/22

Client Project No: 30136112 Sample Matrix: Ground Water Collect Time: 09:43

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS

Aliquot ID: A09642-001 Matrix: Ground Water

Method: EPA 5030C/EPA 8260D

Description: OW-16D2_071122

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	lnit.
1. Acetone	U	L-	μg/L	50	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC
3. Benzene	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC
4. Bromobenzene	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC
5. Bromochloromethane	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC
6. Bromodichloromethane	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
7. Bromoform	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
8. Bromomethane	U		μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
9.2-Butanone	U		μg/L	25	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
10. n-Butylbenzene	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
11. sec-Butylbenzene	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC
12. tert-Butylbenzene	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
13. Carbon Disulfide	U		μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
15. Chlorobenzene	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
16. Chloroethane	U		μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
17. Chloroform	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
18. Chloromethane	U		μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
19. 2-Chlorotoluene	U		μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
21. Dibromochloromethane	U		μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
22. Dibromomethane	U		μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
27.1,1-Dichloroethane	3.5		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
28. 1,2-Dichloroethane	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
29. 1,1-Dichloroethene	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
30. cis-1,2-Dichloroethene	18		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
35. Ethylbenzene	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
36. Ethylene Dibromide	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
37.2-Hexanone	U		μg/L	50	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO

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Order: A09642 Date: 07/14/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2_071122 Chain of Custody: 205973

 Client Project Name:
 TRW Milford (30136112)
 Sample No:
 Collect Date:
 07/11/22

Client Project No: 30136112 Sample Matrix: Ground Water Collect Time: 09:43

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS

Aliquot ID: A09642-001 Matrix: Ground Water

Method: EPA 5030C/EPA 8260D

Description: OW-16D2_071122

						<u>-</u>				
_						Preparation		Analysis		
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.	
38. Isopropylbenzene	U	μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC	
39. 4-Methyl-2-pentanone	U	μg/L	50	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC	
40. Methylene Chloride	U	μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC	
‡ 41.2-Methylnaphthalene	U	μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC	
42. MTBE	U	μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC	
43. Naphthalene	U	μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC	
44. n-Propylbenzene	U	μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC	
45. Styrene	U	μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC	
46.1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC	
47.1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC	
48. Tetrachloroethene	U	μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC	
49. Toluene	U	μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC	
50. 1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC	
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC	
‡ 52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC	
53. Trichloroethene	U	μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC	
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC	
55. 1,2,3-Trichloropropane	U	μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC	
‡ 56.1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC	
57.1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC	
58. 1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC	
59. Vinyl Chloride	U	μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC	
60. m&p-Xylene	U	μg/L	2.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC	
61. o-Xylene	U	μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC	
‡ 62. Xylenes	U	μg/L	3.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC	



Order: A
Date: 0

A09642 07/14/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2R1_071122 Chain of Custody: 205973

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 07/11/22

Client Project No: 30136112 Sample Matrix: Ground Water Collect Time: 10:42

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS

Aliquot ID: A09642-002 Matrix: Ground Water

Method: EPA 5030C/EPA 8260D

Description: OW-16D2R1_071122

1. Acetone U L- μg/L 50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 2. Acrylonitrile U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 3. Benzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 4. Bromobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 5. Bromochloromethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 6. Bromodichloromethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 7. Bromoform U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 8. Bromomethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 8. Bromomethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 9.2-Butanone U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 10. n-Butylbenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 11. sec-Butylbenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 12. tert-Butylbenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 13. Carbon Disulfide U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 14. Carbon Tetrachloride U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 15. Chlorobethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 16. Chlorobethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 17. Chloroform U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 18. Chloromethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 18. Chloromethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 18. Chloromethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 18. Chloromethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 18. Chloromethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 18. Chloromethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 18. Chloromethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19.2-Chlorotoluene							Preparation		Analysis		
2. Acrylonitrile	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
3. Benzene	1. Acetone	U	L-	μg/L	50	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
Bromobenzene	‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
5. Bromochloromethane U µg/L 1.0 1.0 0.7/12/22 VM22G12B 0.7/12/22 15:00 VM22G12B SN 7/12/22 15:00 VM22G12B	3. Benzene	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
6. Bromodichloromethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 7. Bromoform U μg/L 1.0 0.7/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 9. Paufanone U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 10. n-Bulythenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 11. sec-Bulythenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 12. ter-Bulythenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 13. Carbon Disulfide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 14. Carbon Tetrachloride U μg/L 1.0 07/12/22 VM22G12B 07/12/22 15	4. Bromobenzene	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
7. Bromoform U µg/L 1.0 1.0 07/12/22 VM22G12B SO 7/12/22 15:00 VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B	5. Bromochloromethane	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
8. Bromomethane U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 10. Psutyloenzene U µg/L 25 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 10. Psutyloenzene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 11. Sec-Butyloenzene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 12. tent-Butyloenzene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 13. Carbon Disulfide U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 14. Carbon Tetrachloride U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 14. Carbon Tetrachloride U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 15. Chlorobenzene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 16. Chlorotenane U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 18. Chlorotenane U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 18. Chlorotenane U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 18. Chlorotenane U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 18. Chlorotenane U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 20.1,2-Dibromo-3-chloropropane (SIM) U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 20.1,2-Dibromo-3-chloropropane (SIM) U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 22. Dibromomethane U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 23. 1,2-Dichlorobenzene U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 23. 1,2-Dichlorobenzene U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 24. 1,3-Dichlorobenzene U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 25. 1,4-Dichlorobenzene U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 25. 1,4-Dichlorobenzene U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 25. 1,4-Dichlorobenzene U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 25. 1,4-Dichlorobenzene U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 25. 1,4-Dichlorobenzene U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G	6. Bromodichloromethane	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
9.2-Butanone U µg/L 25 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 10.n-Butybenzene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 11.sec-Butybenzene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 11.sec-Butybenzene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 12.ter-Butybenzene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 13. Carbon Disulfide U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 14. Carbon Tetrachloride U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 15. Chlorobenzene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 16. Chlorobenzene U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 17. Chloroform U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 18. Chloromethane U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 18. Chloromethane U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 18. Chloromethane U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 20.1.2-Dibromo-3-chloropropane (SIM) U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 20.1.2-Dibromo-3-chloropropane (SIM) U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 22. Dibromomethane U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 22. Dibromomethane U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 22. Dibromomethane U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 22. Dibromomethane U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 22. Dibromomethane U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 24.1.3-Dichlorobenzene U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/21 15:00 VM22G12B SN 24.1.3-Dichlorobenzene U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/21 15:00 VM22G12B SN 25.1.1-Dichlorobenzene U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/21 15:00 VM22G12B SN 25.1.1-Dichlorobenzene U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/21 15:00 VM22G12B SN 25.1.1-Dichlorobenae U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/21 15:00 VM22G12B SN 25.1.1-Dichlorobenae U µg/L	7. Bromoform	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
10. n-Butylbenzene	8. Bromomethane	U		μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
11. sec-Butybenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 12. tert-Butybenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 13. Carbon Disulfide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 14. Carbon Tetrachloride U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 15. Chlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 16. Chloroethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 17. Chloroform U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 17. Chloroform U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19.2-Chlorotoluene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19.2-Chlorotoluene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19.2-Chlorotoluene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19.2-Chlorotoluene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19.2-Chlorotoluene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 21. Dibromo-3-chloropropane (SIM) U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 22.1 Dibromomethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 23. 1,2-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 24. 1,3-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 25. 1,4-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 25. 1,4-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 25. 1,1-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 26. 1,2-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 27. 1,1-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 28. 1,2-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 28. 1,2-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 31. trans-1,2-Dichloropropene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B S	9.2-Butanone	U		μg/L	25	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
12. tert-Butylbenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 13. Carbon Disulfide U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 14. Carbon Tetrachloride U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 14. Carbon Tetrachloride U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 15. Chlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 16. Chloroethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 17. Chloroform U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 18. Chloromethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotolune U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotolune U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotolune U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 20. 1,2-Dibromo-3-chloropropane (SIM) U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 21. Dibromochloromethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 22. Dibromochloromethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 23. 1,2-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 23. 1,3-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 25. 1,4-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 25. 1,4-Dichloroethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 27. 1,1-Dichloroethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 28. 1,2-Dichloroethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 29. 1,1-Dichloroethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 29. 1,1-Dichloroethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 29. 1,1-Dichloroethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 29. 1,1-Dichloroethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 29. 1,1-Dichloroethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 1	10. n-Butylbenzene	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
13. Carbon Disulfide	11. sec-Butylbenzene	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
14. Carbon Tetrachloride U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 15. Chlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 16. Chloroethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 17. Chloroform U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 18. Chloromethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotoluene U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 21. Dibromo-3-chloropropane (SIM) U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 21. Dibromo-dhloromethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN	12. tert-Butylbenzene	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
15. Chlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 16. Chloroethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 17. Chloroform U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 18. Chloromethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotoluene U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotoluene U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotoluene U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotoluene U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotoluene U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotoluene U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotoluene U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotolenene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotolenene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotolenene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotolenene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotolenene U μg/L 1.0 0.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotolenene U μg/L 1.0 0.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotolenene U μg/L 1.0 0.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotethane U μg/L 1.0 0.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotethane U μg/L 1.0 0.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotethane U μg/L 1.0 0.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotethane U μg/L 1.0 0.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotethane U μg/L 1.0 0.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotethane U μg/L 1.0 0.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotethane U μg/L 1.0 0.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotethane U μg/L 1.0 0.0 07/12/22 VM22G1	13. Carbon Disulfide	U		μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
16. Chloroethane U µg/L 5.0 1.0 07/12/22 VM22G12B S7/12/22 15:00 VM22G12B SN 17. Chloroform U µg/L 1.0 1.0 07/12/22 VM22G12B S7/12/22 15:00 VM22G12B SN 18. Chloromethane U µg/L 5.0 1.0 07/12/22 VM22G12B S7/12/22 15:00 VM22G12B SN 19. 2-Chlorotoluene U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 20. 1,2-Dibromo-3-chloropropane (SIM) U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 21. Dibromochloromethane U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 22. Dibromomethane U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 23. 1,2-Dichlorobenzene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 25. 1,4-Dichlorobenzene U µg/L	14. Carbon Tetrachloride	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
17. Chloroform U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 18. Chloromethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotoluene U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 20. 1,2-Dibromo-3-chloropropane (SIM) U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 21. Dibromochloromethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 22. Dibromomethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 23. 1,2-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 24. 1,3-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 25. 1,4-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 25. 1,4-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 26. Dichlorodifluoromethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 27. 1,1-Dichlorobethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 27. 1,1-Dichloroethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 28. 1,2-Dichloroethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 28. 1,2-Dichloroethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 29. 1,1-Dichloroethene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 30. cis-1,2-Dichloroethene 10 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 31. trans-1,2-Dichloroethene 10 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 31. trans-1,2-Dichloropropene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 33. cis-1,3-Dichloropropene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 33. cis-1,3-Dichloropropene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 34. trans-1,3-Dichloropropene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 35. Ethylbenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 36. Ethylbenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 0	15. Chlorobenzene	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
18. Chloromethane U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19.2-Chlorotoluene U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 20.1,2-Dibromo-3-chloropropane (SIM) U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 21. Dibromochloromethane U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 22. Dibromomethane U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 23. 1,2-Dichlorobenzene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 24. 1,3-Dichlorobenzene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 25. 1,4-Dichlorobenzene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 26. Dichlorodifluoromethane U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 27. 1,1-Dichloroethane U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 28. 1,2-Dichloroethane U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 28. 1,2-Dichloroethane U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 28. 1,2-Dichloroethene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 30. cis-1,2-Dichloroethene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 31. trans-1,2-Dichloroethene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 31. trans-1,2-Dichloroethene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 31. trans-1,2-Dichloroethene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 32. 1,2-Dichloropropene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 33. cis-1,3-Dichloropropene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 34. trans-1,3-Dichloropropene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 34. trans-1,3-Dichloropropene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 34. trans-1,3-Dichloropropene U µg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 35. Ethylene Dibromide U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/21 5:00 VM22G12B SN	16. Chloroethane	U		μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
19.2-Chlorotoluene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 20.1,2-Dibromo-3-chloropropane (SIM) U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 21. Dibromochloromethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 22. Dibromomethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 23. 1,2-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 24. 1,3-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 25. 1,4-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 26. Dichlorodifluoromethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 26. Dichlorodifluoromethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 27. 1,1-Dichloroethane 2.2 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 28. 1,2-Dichloroethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 29. 1,1-Dichloroethene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 30. cis-1,2-Dichloroethene 20 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 31. trans-1,2-Dichloroethene 1.2 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 32. 1,2-Dichloropropane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 33. cis-1,3-Dichloropropene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 34. trans-1,3-Dichloropropene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 35. Ethylene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 36. Ethylene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN	17. Chloroform	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
20.1,2-Dibromo-3-chloropropane (SIM) U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 21. Dibromochloromethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 22. Dibromomethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 23.1,2-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 24.1,3-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 25.1,4-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 26. Dichlorodifluoromethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 27.1,1-Dichloroethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 28.1,2-Dichloroethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 29.1,1-Dichloroethene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 30. cis-1,2-Dichloroethene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 31. trans-1,2-Dichloroethene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 31. trans-1,2-Dichloroethene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 33. cis-1,3-Dichloropropene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 33. cis-1,3-Dichloropropene U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 34. trans-1,3-Dichloropropene U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 35. Ethylbenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 36. Ethylpene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 36. Ethylpene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 36. Ethylpene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 36. Ethylpene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 36. Ethylpene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 36. Ethylpene Dibromide U μg/L 1.0 1.0 07/12/22 07/12/22 15:00 VM22G12B SN 36. Ethylpene Dibromide U μg/L 1.0 1.0 07/12/22 07/12/22 15:00 VM22G12B SN 36. Ethylpene Dibromi	18. Chloromethane	U		μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
21. Dibromochloromethane U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 22. Dibromomethane U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 23. 1,2-Dichlorobenzene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 24. 1,3-Dichlorobenzene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 25. 1,4-Dichlorobenzene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 26. Dichlorodifluoromethane U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 27. 1,1-Dichloroethane U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 28. 1,2-Dichloroethane U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 29. 1,1-Dichloroethane U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 29. 1,1-Dichloroethene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 30. cis-1,2-Dichloroethene 20 µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 31. trans-1,2-Dichloroethene 1.2 µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 31. trans-1,2-Dichloropropene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 32. 1,2-Dichloropropene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 33. cis-1,3-Dichloropropene U µg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 34. trans-1,3-Dichloropropene U µg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 35. Ethylbenzene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 36. Ethylene Dibromide U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 36. Ethylene Dibromide	19. 2-Chlorotoluene	U		μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
22. Dibromomethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 23. 1,2-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 24. 1,3-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 25. 1,4-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 26. Dichlorodifluoromethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 27. 1,1-Dichloroethane 2.2 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 28. 1,2-Dichloroethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 29. 1,1-Dichloroethene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 30. cis-1,2-Dichloroethene 20 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN	‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
23. 1,2-Dichlorobenzene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 24. 1,3-Dichlorobenzene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 25. 1,4-Dichlorobenzene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 26. Dichlorodifluoromethane U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 27. 1,1-Dichloroethane 2.2 µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 28. 1,2-Dichloroethane U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 29. 1,1-Dichloroethane U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 29. 1,1-Dichloroethene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 30. cis-1,2-Dichloroethene 20 µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 31. trans-1,2-Dichloroethene 1.2 µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 32. 1,2-Dichloropropane U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 33. cis-1,3-Dichloropropane U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 34. trans-1,3-Dichloropropene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 35. Ethylbenzene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 36. Ethylene Dibromide U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 36. Ethylene Dibromide	21. Dibromochloromethane	U		μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
24. 1,3-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 25. 1,4-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 26. Dichlorodifluoromethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 27. 1,1-Dichloroethane 2.2 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 28. 1,2-Dichloroethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 29. 1,1-Dichloroethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 30. cis-1,2-Dichloroethene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 31. trans-1,2-Dichloroethene 20 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 31. trans-1,2-Dichloroethene 1.2 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 32. 1,2-Dichloroethene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 33. cis-1,3-Dichloropropane U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 34. trans-1,3-Dichloropropene U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 34. trans-1,3-Dichloropropene U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 35. Ethylbenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 36. Ethylene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN	22. Dibromomethane	U		μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
25. 1,4-Dichlorobenzene U μg/L 5. 0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 26. Dichlorodifluoromethane U μg/L 5. 0 1. 0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 27. 1,1-Dichloroethane 2.2 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 28. 1,2-Dichloroethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 29. 1,1-Dichloroethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 30. cis-1,2-Dichloroethene 20 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 31. trans-1,2-Dichloroethene 1.2 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 32. 1,2-Dichloroptopane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 33. cis-1,3-Dichloroptopane U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 34. trans-1,3-Dichloropropene U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 34. trans-1,3-Dichloropropene U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 35. Ethylbenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 36. Ethylene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN	23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
26. Dichlorodifluoromethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 27. 1,1-Dichloroethane 22. μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 28. 1,2-Dichloroethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 29. 1,1-Dichloroethene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 30. cis-1,2-Dichloroethene 20 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 31. trans-1,2-Dichloroethene 1.2 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 32. 1,2-Dichloropropane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 33. cis-1,3-Dichloropropene U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 34. trans-1,3-Dichloropropene U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 35. Ethylbenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 36. Ethylene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN	24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
27. 1,1-Dichloroethane 2.2 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 28. 1,2-Dichloroethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 29. 1,1-Dichloroethene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 30. cis-1,2-Dichloroethene 20 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 31. trans-1,2-Dichloroethene 1.2 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 32. 1,2-Dichloropropane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 33. cis-1,3-Dichloropropene U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 34. trans-1,3-Dichloropropene U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 35. Ethylene Dibromide U μg/L	25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
28. 1,2-Dichloroethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 29. 1,1-Dichloroethene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 30. cis-1,2-Dichloroethene 20 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 31. trans-1,2-Dichloroethene 1.2 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 32. 1,2-Dichloropropane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 33. cis-1,3-Dichloropropane U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 34. trans-1,3-Dichloropropene U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 35. Ethylbenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 36. Ethylene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN	26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
29. 1,1-Dichloroethene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 30. cis-1,2-Dichloroethene 20 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 31. trans-1,2-Dichloroethene 1.2 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 32. 1,2-Dichloropropane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 33. cis-1,3-Dichloropropane U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 34. trans-1,3-Dichloropropene U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 35. Ethylbenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 36. Ethylene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN	27.1,1-Dichloroethane	2.2		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
30. cis-1,2-Dichloroethene 20 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 31. trans-1,2-Dichloroethene 1.2 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 32. 1,2-Dichloropropane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 33. cis-1,3-Dichloropropene U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 34. trans-1,3-Dichloropropene U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 35. Ethylbenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 36. Ethylene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN	28.1,2-Dichloroethane	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
31. trans-1,2-Dichloroethene 1.2 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 32. 1,2-Dichloropropane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 33. cis-1,3-Dichloropropene U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 34. trans-1,3-Dichloropropene U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 35. Ethylbenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 36. Ethylene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN	29. 1,1-Dichloroethene	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
32. 1,2-Dichloropropane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 33. cis-1,3-Dichloropropene U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 34. trans-1,3-Dichloropropene U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 35. Ethylbenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 36. Ethylene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN	30. cis-1,2-Dichloroethene	20		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
33. cis-1,3-Dichloropropene U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 34. trans-1,3-Dichloropropene U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 35. Ethylbenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 36. Ethylene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN	31. trans-1,2-Dichloroethene	1.2		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
34. trans-1,3-Dichloropropene U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 35. Ethylbenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 36. Ethylene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 36. Ethylene Dibromide	32.1,2-Dichloropropane	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
35. Ethylbenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 36. Ethylene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 37/12/22 15:00 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 07/12/22 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 07/12/22 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 07/12/22 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 07/12/22 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 07/12/22 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 07/12/22 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 07/12/22 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 07/12/22 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 07/12/22 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 07/12/22 VM22G12B SN 38. Ethylene U μg/L 1.0 07/12/22 VM22G12B SN 38. Ethylene U μg/L 1.0 07/12/22 VM22G	33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
36. Ethylene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN	34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
7777	35. Ethylbenzene	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
37.2-Hexanone U μg/L 50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN	36. Ethylene Dibromide	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
	37.2-Hexanone	U		μg/L	50	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC

1914Holloway Drive 11766 E Grand River 8660 S Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order: A09642 Date: 07/14/22

Sample Description: OW-16D2R1_071122 Chain of Custody: 205973

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 07/11/22

Client Project No: 30136112 Sample Matrix: Ground Water Collect Time: 10:42

Sample Comments:

Client Identification:

Arcadis U.S., Inc. - Novi

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS

Aliquot ID: A09642-002 Matrix: Ground Water

Method: EPA 5030C/EPA 8260D

Description: OW-16D2R1_071122

38. Isopropylbenzene 39. 4-Methyl-2-pentanone 40. Methylene Chloride U μg/L 50 40. Methylene Chloride U μg/L 5.0 ‡ 41. 2-Methylnaphthalene U μg/L 5.0 42. MTBE U μg/L 5.0 43. Naphthalene U μg/L 5.0 44. n-Propylbenzene U μg/L 1.0 45. Styrene		i icpaid	ation	Ana	alysis	
39.4-Methyl-2-pentanone U μg/L 50 40. Methylene Chloride U μg/L 5.0 ‡ 41.2-Methylnaphthalene U μg/L 5.0 42. MTBE U μg/L 5.0 43. Naphthalene U μg/L 5.0 44. n-Propylbenzene U μg/L 1.0 45. Styrene U μg/L 1.0	ilution	P. Date	P. Batch	A. Date	A. Batch	Init.
40. Methylene Chloride U μg/L 5.0 ‡ 41. 2-Methylnaphthalene U μg/L 5.0 42. MTBE U μg/L 5.0 43. Naphthalene U μg/L 5.0 44. n-Propylbenzene U μg/L 1.0 45. Styrene U μg/L 1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
‡ 41.2-Methylnaphthalene U μg/L 5.0 42. MTBE U μg/L 5.0 43. Naphthalene U μg/L 5.0 44. n-Propylbenzene U μg/L 1.0 45. Styrene U μg/L 1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
42. MTBE U μg/L 5.0 43. Naphthalene U μg/L 5.0 44. n-Propylbenzene U μg/L 1.0 45. Styrene U μg/L 1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
43. Naphthalene U μg/L 5.0 44. n-Propylbenzene U μg/L 1.0 45. Styrene U μg/L 1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
44. n-Propylbenzene U μg/L 1.0 45. Styrene U μg/L 1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
45. Styrene U μg/L 1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
,	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
46. 1,1,1,2-Tetrachloroethane U μg/L 1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
47.1,1,2,2-Tetrachloroethane U μ g/L 1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
48. Tetrachloroethene U $\mu g/L$ 1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
49. Toluene U μg/L 1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
50.1,2,4-Trichlorobenzene U μ g/L 5.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
51.1,1,1-Trichloroethane U $\mu g/L$ 1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
$\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
53. Trichloroethene U μg/L 1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
54. Trichlorofluoromethane U μg/L 1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
55.1,2,3-Trichloropropane U $\mu g/L$ 1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
‡ 56.1,2,3-Trimethylbenzene U µg/L 1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
57.1,2,4-Trimethylbenzene U μg/L 1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
58.1,3,5-Trimethylbenzene U μg/L 1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
59. Vinyl Chloride U μg/L 1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
60. m&p-Xylene U μg/L 2.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
61. o-Xylene U μg/L 1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
‡ 62. Xylenes U μg/L 3.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC



Order: Date:

A09642 07/14/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: FIELD BLANK_071122 Chain

Chain of Custody: 205973

Collect Date: **07/11/22**

Client Project No: 30136112 Sample Matrix: Blank: Field Collect Time: 10:10

Sample Comments:

Client Project Name:

TRW Milford (30136112)

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Sample No:

Volatile Organic Compounds (VOCs) by GC/MS

Aliquot ID: A09642-003 Matrix: Blank: Field

Method: EPA 5030C/EPA 8260D

Description: FIELD BLANK _071122

						Prepa			alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	lnit.
1. Acetone	U	L-	μg/L	50	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
2. Acrylonitrile	U		μg/L	2.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
3. Benzene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
4. Bromobenzene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
5. Bromochloromethane	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
6. Bromodichloromethane	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
7. Bromoform	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRO
8. Bromomethane	U		μg/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRO
9. 2-Butanone	U		μg/L	25	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
10. n-Butylbenzene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRO
11. sec-Butylbenzene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
12. tert-Butylbenzene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRO
13. Carbon Disulfide	U		μg/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRO
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRO
15. Chlorobenzene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRO
16. Chloroethane	U		μg/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BR
17. Chloroform	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BR
18. Chloromethane	U		μg/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BR
19. 2-Chlorotoluene	U		μg/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BR
20. 1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BR
21. Dibromochloromethane	U		μg/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BR
22. Dibromomethane	U		μg/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BR
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BR
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRO
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRO
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BR
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRO
28. 1,2-Dichloroethane	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BR
29.1,1-Dichloroethene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRO
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BR
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRO
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRO
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRO
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BR
35. Ethylbenzene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BR
36. Ethylene Dibromide	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BR
37.2-Hexanone	U		μg/L	50	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRO

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F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584

Page:



Order: A09642 Date: 07/14/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: FIELD BLANK_071122 Chain of Custody: 205973

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 07/11/22

Client Project No: 30136112 Sample Matrix: Blank: Field Collect Time: 10:10

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS

Aliquot ID: A09642-003 Matrix: Blank: Field

Method: EPA 5030C/EPA 8260D

Description: FIELD BLANK _071122

					Prepa	ration	An	alysis	
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
38. Isopropylbenzene	U	μg/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
39. 4-Methyl-2-pentanone	U	μg/L	50	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
40. Methylene Chloride	U	μg/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
‡ 41.2-Methylnaphthalene	U	μg/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
42. MTBE	U	μg/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
43. Naphthalene	U	μg/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
44. n-Propylbenzene	U	μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
45. Styrene	U	μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
46. 1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
47.1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
48. Tetrachloroethene	U	μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
49. Toluene	U	μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
50. 1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
‡ 52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
53. Trichloroethene	U	μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
55. 1,2,3-Trichloropropane	U	μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
‡ 56.1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
57.1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
58. 1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
59. Vinyl Chloride	U	μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
60. m&p-Xylene	U	μg/L	2.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
61. o-Xylene	U	μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
‡ 62. Xylenes	U	μg/L	3.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC

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Order:

A09642 07/14/22

Client Identification: Arcadis U.S., Inc. - Novi

Sample Description: TB005473

Chain of Custody:

205973

Client Project Name:
Client Project No:

TRW Milford (30136112)

Sample No:

Collect Date:

07/11/22

30136112

Volatile Organic Compounds (VOCs) by GC/MS

Sample Matrix: Blank: Trip

Collect Time:

Matrix: Blank: Trip

NA

Sample Comments:

Definitions: Q: 0

Q: Qualifier (see definitions at end of report) NA: Not Applicabl

NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Aliquot ID: A09642-004 Description: TB005473

Method: EPA 5030C/EPA 8260D				Des	cription:	TB005473				
						Prepa	ration	An	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	lnit.
1. Acetone	U	L-	μg/L	50	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRO
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRO
3. Benzene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRO
4. Bromobenzene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRO
5. Bromochloromethane	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRO
6. Bromodichloromethane	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
7. Bromoform	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
8. Bromomethane	U		μg/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
9. 2-Butanone	U		μg/L	25	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
10. n-Butylbenzene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
11. sec-Butylbenzene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
12. tert-Butylbenzene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
13. Carbon Disulfide	U		μg/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
15. Chlorobenzene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
16. Chloroethane	U		μg/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
17. Chloroform	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
18. Chloromethane	U		μg/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
19. 2-Chlorotoluene	U		μg/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
21. Dibromochloromethane	U		μg/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
22. Dibromomethane	U		μg/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
28. 1,2-Dichloroethane	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
29. 1,1-Dichloroethene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
35. Ethylbenzene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
36. Ethylene Dibromide	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
37. 2-Hexanone	U		μg/L	50	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR

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Order: Date:

A09642 07/14/22

TB005473 Client Identification: Arcadis U.S., Inc. - Novi Chain of Custody: 205973 Sample Description:

Client Project Name: TRW Milford (30136112) Collect Date: 07/11/22 Sample No:

Client Project No: 30136112 Sample Matrix: Blank: Trip Collect Time: NA

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC		Aliq	uot ID:	A09642-004	Matrix: I	Blank: Trip				
Method: EPA 5030C/EPA 8260D				Des	cription:	TB005473				
						Prepar	ation	An	alysis	
Parameter(s)	Result	Q Ui	nits F	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
38. Isopropylbenzene	U	μ	g/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRC
39. 4-Methyl-2-pentanone	U	μ	g/L	50	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRC
40. Methylene Chloride	U	μ	g/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRC
‡ 41.2-Methylnaphthalene	U	μ	g/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRC
42. MTBE	U	μ	g/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRC
43. Naphthalene	U	μ	g/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRC
44. n-Propylbenzene	U	μ	g/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRC
45. Styrene	U	μ	g/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRC
46. 1,1,1,2-Tetrachloroethane	U	μ	g/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRC
47.1,1,2,2-Tetrachloroethane	U	μ	g/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRC
48. Tetrachloroethene	U	μ	g/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRC
49. Toluene	U	μ	g/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRC
50. 1,2,4-Trichlorobenzene	U	μ	g/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRC
51.1,1,1-Trichloroethane	U	μ	g/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRC
‡ 52.1,1,2-Trichloroethane	U	μ	g/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRC
53. Trichloroethene	U	μ	g/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRC
54. Trichlorofluoromethane	U	μ	g/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRC
55. 1,2,3-Trichloropropane	U	μ	g/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRC
‡ 56.1,2,3-Trimethylbenzene	U	μ	g/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRC
57.1,2,4-Trimethylbenzene	U	μ	g/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRC
58. 1,3,5-Trimethylbenzene	U	μ	g/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRC
59. Vinyl Chloride	U	μ	g/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRC
60. m&p-Xylene	U	μ	g/L	2.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRC
61. o-Xylene	U	μ	g/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRC
‡ 62. Xylenes	U	μ	g/L	3.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRC

lab@fibertec.us



Analytical Laboratory Report Laboratory Project Number: A09642

Order: A09642 Date: 07/14/22

Definitions/ Qualifiers:

- A: Spike recovery or precision unusable due to dilution.
- **B:** The analyte was detected in the associated method blank.
- E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
- **J:** The concentration is an estimated value.
- M: Modified Method
- **U:** The analyte was not detected at or above the reporting limit.
- X: Matrix Interference has resulted in a raised reporting limit or distorted result.
- W: Results reported on a wet-weight basis.
- *: Value reported is outside QC limits

Exception Summary:

L- : Recovery in the associated laboratory sample (LCS) exceeds the lower control limit. Results may be biased low.

Analysis Locations:

All analyses performed in Holt.



Accreditation Number(s):

T104704518-19-8 (TX)



Order ID: A09642 Page: 1 of 9 Date: 07/14/22

VM22G12B: Method Blank (MB)

Run Time: VM22G12B.MB 07/12/2022 11:43 [VM	22G12B]					
	MB Result	MB	MB RDL			
		Qualifier				
Analyte	μg/L		μg/L			
Acetone	U		50			
Acrylonitrile	U		2.0			
Benzene	U		1.0			
Bromobenzene	U		1.0			
Bromochloromethane	U		1.0			
Bromodichloromethane	U		1.0			
Bromoform	U		1.0			
Bromomethane	U		5.0			
2-Butanone	U		25			
n-Butylbenzene	U		1.0			
sec-Butylbenzene	U		1.0			
tert-Butylbenzene	U		1.0			
Carbon Disulfide	U		5.0			
Carbon Tetrachloride	U		1.0			
Chlorobenzene	U		1.0			
Chloroethane	U		5.0			
Chloroform	U		1.0			
Chloromethane	U		5.0			
2-Chlorotoluene	U		5.0			
1,2-Dibromo-3-chloropropane (SIM)	U		1.0			
Dibromochloromethane	U		5.0			
Dibromomethane	U		5.0			
1,2-Dichlorobenzene	U		1.0			
1,3-Dichlorobenzene	U		1.0			
1,4-Dichlorobenzene	U		1.0			
Dichlorodifluoromethane	U		5.0			
1,1-Dichloroethane	U		1.0			
1,2-Dichloroethane	U		1.0			
1,1-Dichloroethene	U		1.0			
cis-1,2-Dichloroethene	U		1.0			
trans-1,2-Dichloroethene	U		1.0			
1,2-Dichloropropane	U		1.0			
cis-1,3-Dichloropropene	U		0.50			
	1014 Hollowow Drive	•	LH+ M/I /00/0	T: (517) 600 02/15	E /517\ 600 /0289	

1914 Holloway Drive 11766 E Grand River 8660 S Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order ID: A09642 Page: 2 of 9 Date: 07/14/22

VM22G12B: Method Blank (MB)

Run Time: VM22G12B.MB 07/12/2022 11:43 [VM22	2G12B]		
	MB Result	MB	MB RDL
		Qualifier	
Analyte	μg/L		μg/L
trans-1,3-Dichloropropene	U		0.50
Ethylbenzene	U		1.0
Ethylene Dibromide	U		1.0
2-Hexanone	U		50
Isopropylbenzene	U		5.0
4-Methyl-2-pentanone	U		50
Methylene Chloride	U		5.0
2-Methylnaphthalene	U		5.0
MTBE	U		5.0
Naphthalene	U		5.0
n-Propylbenzene	U		1.0
Styrene	U		1.0
1,1,1,2-Tetrachloroethane	U		1.0
1,1,2,2-Tetrachloroethane	U		1.0
Tetrachloroethene	U		1.0
Toluene	U		1.0
1,2,4-Trichlorobenzene	U		5.0
1,1,1-Trichloroethane	U		1.0
1,1,2-Trichloroethane	U		1.0
Trichloroethene	U		1.0
Trichlorofluoromethane	U		1.0
1,2,3-Trichloropropane	U		1.0
1,2,3-Trimethylbenzene	U		1.0
1,2,4-Trimethylbenzene	U		1.0
1,3,5-Trimethylbenzene	U		1.0
Vinyl Chloride	U		1.0
m&p-Xylene	U		2.0
o-Xylene	U		1.0
4-Bromofluorobenzene(S)	89		80-120
Dibromofluoromethane(S)	89		80-120
1,2-Dichloroethane-d4(S)	114		80-120
Toluene-d8(S)	94		80-120

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VM22G12B: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VM22G12B.LCS: 07/12/2022 10:19	-	2G12B.LCSD: 07/1	_	=								
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Am	ount			Qualifier	•	unt Result	Rec.	Qualifier			Qualifie
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
Acetone	50.0	25.8	52	54-140	*	50.0	25.8	52	*	0	20	
Acrylonitrile	50.0	46.4	93	70-130		50.0	47.2	94		1	20	
Benzene	50.0	46.3	93	80-120		50.0	45.3	91		2	20	
Bromobenzene	50.0	48.1	96	75-125		50.0	47.6	95		1	20	
Bromochloromethane	50.0	47.6	95	70-130		50.0	46.5	93		2	20	
Bromodichloromethane	50.0	43.2	86	75-120		50.0	42.9	86		0	20	
Bromoform	50.0	48.2	96	70-130		50.0	48.8	98		2	20	
Bromomethane	50.0	54.0	108	68-135		50.0	51.6	103		5	20	
2-Butanone	50.0	36.4	73	70-148		50.0	38.3	77		5	20	
n-Butylbenzene	50.0	53.1	106	70-133		50.0	50.4	101		5	20	
sec-Butylbenzene	50.0	52.2	104	70-125		50.0	49.7	99		5	20	
tert-Butylbenzene	50.0	52.0	104	70-130		50.0	50.1	100		4	20	
Carbon Disulfide	50.0	43.5	87	70-130		50.0	36.6	73		18	20	
Carbon Tetrachloride	50.0	41.8	84	70-130		50.0	40.8	82		2	20	
Chlorobenzene	50.0	50.1	100	80-120		50.0	48.9	98		2	20	
Chloroethane	50.0	57.8	116	61-130		50.0	55.9	112		4	20	
Chloroform	50.0	47.0	94	80-120		50.0	45.9	92		2	20	
Chloromethane	50.0	50.3	101	67-125		50.0	47.5	95		6	20	
2-Chlorotoluene	50.0	48.4	97	75-125		50.0	47.6	95		2	20	
1,2-Dibromo-3-chloropropane (SIM)	50.0	47.5	95	70-130		50.0	48.4	97		2	20	
Dibromochloromethane	50.0	43.2	86	70-130		50.0	44.7	89		3	20	
Dibromomethane	50.0	42.8	86	75-125		50.0	42.7	85		1	20	
1,2-Dichlorobenzene	50.0	50.5	101	70-120		50.0	49.8	100		1	20	
1,3-Dichlorobenzene	50.0	50.8	102	75-125		50.0	49.1	98		4	20	
1,4-Dichlorobenzene	50.0	51.0	102	75-125		50.0	49.8	100		2	20	
Dichlorodifluoromethane	50.0	49.2	98	70-136		50.0	45.9	92		6	20	
1,1-Dichloroethane	50.0	47.9	96	70-130		50.0	46.0	92		4	20	
1,2-Dichloroethane	50.0	49.8	100	70-130		50.0	48.9	98		2	20	
1,1-Dichloroethene	50.0	50.3	101	78-120		50.0	43.1	86		16	20	
cis-1,2-Dichloroethene	50.0	48.8	98	70-125		50.0	48.0	96		2	20	
trans-1,2-Dichloroethene	50.0	51.1	102	70-130		50.0	49.4	99		3	20	
1,2-Dichloropropane	50.0	47.4	95	80-121		50.0	46.5	93		2	20	
cis-1,3-Dichloropropene	50.0	41.1	82	70-130		50.0	40.8	82		0	20	

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RSN: VM22G12B-221950714145859



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VM22G12B: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VM22G12B.LCS: 07/12/2022 10		2G12B.LCSD: 07/1	_	=								
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Am	ount			Qualifier	Spike Amount	Result	Rec.	Qualifier			Qualifie
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
rans-1,3-Dichloropropene	50.0	44.4	89	70-132		50.0	44.8	90		1	20	
Ethylbenzene	50.0	51.5	103	80-120		50.0	49.2	98		5	20	
Ethylene Dibromide	50.0	44.2	88	80-120		50.0	45.7	91		3	20	
2-Hexanone	50.0	47.8	96	70-130		50.0	48.2	96		0	20	
sopropylbenzene	50.0	50.9	102	75-125		50.0	48.5	97		5	20	
4-Methyl-2-pentanone	50.0	53.0	106	70-130		50.0	52.3	105		1	20	
Methylene Chloride	50.0	47.2	94	70-130		50.0	45.2	90		4	20	
2-Methylnaphthalene	50.0	45.9	92	70-130		50.0	46.8	94		2	20	
MTBE	50.0	47.3	95	70-125		50.0	49.8	100		5	20	
Naphthalene	50.0	43.3	87	70-130		50.0	43.3	87		0	20	
n-Propylbenzene	50.0	50.9	102	70-130		50.0	49.0	98		4	20	
Styrene	50.0	43.1	86	70-130		50.0	41.9	84		2	20	
,1,1,2-Tetrachloroethane	50.0	46.9	94	80-130		50.0	47.2	94		0	20	
,1,2,2-Tetrachloroethane	50.0	49.6	99	70-130		50.0	50.2	100		1	20	
Tetrachloroethene	50.0	49.8	100	70-130		50.0	49.0	98		2	20	
Toluene	50.0	48.5	97	80-120		50.0	45.3	91		6	20	
1,2,4-Trichlorobenzene	50.0	48.3	97	70-130		50.0	47.0	94		3	20	
,1,1-Trichloroethane	50.0	43.3	87	70-130		50.0	42.4	85		2	20	
,1,2-Trichloroethane	50.0	46.2	92	75-125		50.0	48.5	97		5	20	
 Trichloroethene	50.0	43.7	87	71-125		50.0	42.4	85		2	20	
richlorofluoromethane	50.0	55.3	111	70-133		50.0	54.0	108		3	20	
,2,3-Trichloropropane	50.0	51.2	102	75-125		50.0	52.1	104		2	20	
,2,3-Trimethylbenzene	50.0	50.4	101	70-130		50.0	48.8	98		3	20	
,2,4-Trimethylbenzene	50.0	51.9	104	75-130		50.0	50.2	100		4	20	
,3,5-Trimethylbenzene	50.0	51.7	103	75-130		50.0	50.1	100		3	20	
/inyl Chloride	50.0	48.9	98	74-125		50.0	45.2	90		9	20	
n&p-Xylene	100	99.8	100	75-130		100	95.1	95		5	20	
o-Xylene	50.0	49.3	99	80-120		50.0	47.3	95		4	20	
4-Bromofluorobenzene(S)			98	80-120				97				
Dibromofluoromethane(S)			93	80-120				93				
1,2-Dichloroethane-d4(S)			111	80-120				110				
Toluene-d8(S)			99	80-120				95				

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VM22G13A: Method Blank (MB)

Puin Time: VM22G13A MR 07/13/2023 41:01 PVM22G13A1

Run Time: VM22G13A.MB 07/13/2022 11:01			
	MB Result MB	MB RDL	
		llifier	
Analyte	μg/L	μg/L	
Acetone	U	50	
Acrylonitrile	U	2.0	
Benzene	U	1.0	
Bromobenzene	U	1.0	
Bromochloromethane	U	1.0	
Bromodichloromethane	U	1.0	
Bromoform	U	1.0	
Bromomethane	U	5.0	
2-Butanone	U	25	
n-Butylbenzene	U	1.0	
sec-Butylbenzene	U	1.0	
tert-Butylbenzene	U	1.0	
Carbon Disulfide	U	5.0	
Carbon Tetrachloride	U	1.0	
Chlorobenzene	U	1.0	
Chloroethane	U	5.0	
Chloroform	U	1.0	
Chloromethane	U	5.0	
2-Chlorotoluene	U	5.0	
1,2-Dibromo-3-chloropropane (SIM)	U	1.0	
Dibromochloromethane	U	5.0	
Dibromomethane	U	5.0	
1,2-Dichlorobenzene	U	1.0	
1,3-Dichlorobenzene	U	1.0	
1,4-Dichlorobenzene	U	1.0	
Dichlorodifluoromethane	U	5.0	
1,1-Dichloroethane	U	1.0	
1,2-Dichloroethane	U	1.0	
1,1-Dichloroethene	U	1.0	
cis-1,2-Dichloroethene	U	1.0	
trans-1,2-Dichloroethene	U	1.0	
1,2-Dichloropropane	U	1.0	
cis-1,3-Dichloropropene	U	0.50	
,5 2.0			
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 1914 Holloway Drive
 Holt, MI 48842
 T: (517) 699-0345
 F: (517) 699-0388

 11766 E Grand River
 Bighton, MI 48116
 T: (810) 220-3300
 F: (810) 220-3311

 8660 S Maddinaw Trail
 Cadillac, MI 49601
 T: (231) 775-8368
 F: (231) 775-8584



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VM22G13A: Method Blank (MB)

Run Time: VM22G13A.MB 07/13/2022 11:0	01 [VM22G13A]			
	MB Result	MB	MB RDL	
		Qualifier		
Analyte	μg/L		µg/L	
trans-1,3-Dichloropropene	U		0.50	
Ethylbenzene	U		1.0	
Ethylene Dibromide	U		1.0	
2-Hexanone	U		50	
sopropylbenzene	U		5.0	
4-Methyl-2-pentanone	U		50	
Methylene Chloride	U		5.0	
2-Methylnaphthalene	U		5.0	
МТВЕ	U		5.0	
Naphthalene	U		5.0	
n-Propylbenzene	U		1.0	
Styrene	U		1.0	
,1,1,2-Tetrachloroethane	U		1.0	
1,1,2,2-Tetrachloroethane	U		1.0	
Tetrachloroethene	U		1.0	
oluene	U		1.0	
,2,4-Trichlorobenzene	U		5.0	
,1,1-Trichloroethane	U		1.0	
,1,2-Trichloroethane	U		1.0	
richloroethene	U		1.0	
richlorofluoromethane	U		1.0	
1,2,3-Trichloropropane	U		1.0	
,2,3-Trimethylbenzene	U		1.0	
,2,4-Trimethylbenzene	U		1.0	
1,3,5-Trimethylbenzene	U		1.0	
/inyl Chloride	U		1.0	
n&p-Xylene	U		2.0	
-Xylene	U		1.0	
4-Bromofluorobenzene(S)	91		80-120	
Dibromofluoromethane(S)	91		80-120	
1,2-Dichloroethane-d4(S)	113		80-120	
Toluene-d8(S)	94		80-120	

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VM22G13A: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VM22G13A.LCS: 07/13/2022 09:37				-								
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Am				Qualifier	Spike Amo		Rec.	Qualifier			Qualifie
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
Acetone	50.0	25.8	52	54-140	*	50.0	25.6	51	*	2	20	
Acrylonitrile	50.0	48.0	96	70-130		50.0	48.5	97		1	20	
Benzene	50.0	46.4	93	80-120		50.0	47.6	95		2	20	
Bromobenzene	50.0	49.5	99	75-125		50.0	48.6	97		2	20	
Bromochloromethane	50.0	48.8	98	70-130		50.0	48.9	98		0	20	
Bromodichloromethane	50.0	45.0	90	75-120		50.0	45.6	91		1	20	
Bromoform	50.0	50.1	100	70-130		50.0	51.4	103		3	20	
Bromomethane	50.0	53.1	106	68-135		50.0	55.7	111		5	20	
2-Butanone	50.0	37.5	75	70-148		50.0	38.4	77		3	20	
n-Butylbenzene	50.0	55.0	110	70-133		50.0	55.1	110		0	20	
sec-Butylbenzene	50.0	53.5	107	70-125		50.0	53.6	107		0	20	
tert-Butylbenzene	50.0	52.8	106	70-130		50.0	53.1	106		0	20	
Carbon Disulfide	50.0	44.6	89	70-130		50.0	45.2	90		1	20	
Carbon Tetrachloride	50.0	45.1	90	70-130		50.0	45.9	92		2	20	
Chlorobenzene	50.0	50.8	102	80-120		50.0	51.5	103		1	20	
Chloroethane	50.0	58.5	117	61-130		50.0	59.2	118		1	20	
Chloroform	50.0	47.6	95	80-120		50.0	48.2	96		1	20	
Chloromethane	50.0	49.2	98	67-125		50.0	52.3	105		7	20	
2-Chlorotoluene	50.0	49.5	99	75-125		50.0	49.5	99		0	20	
1,2-Dibromo-3-chloropropane (SIM)	50.0	49.5	99	70-130		50.0	49.7	99		0	20	
Dibromochloromethane	50.0	45.4	91	70-130		50.0	46.5	93		2	20	
Dibromomethane	50.0	45.8	92	75-125		50.0	45.7	91		1	20	
1,2-Dichlorobenzene	50.0	51.2	102	70-120		50.0	51.1	102		0	20	
1,3-Dichlorobenzene	50.0	51.7	103	75-125		50.0	51.7	103		0	20	
1,4-Dichlorobenzene	50.0	51.8	104	75-125		50.0	51.5	103		1	20	
Dichlorodifluoromethane	50.0	53.2	106	70-136		50.0	55.4	111		5	20	
1,1-Dichloroethane	50.0	48.0	96	70-130		50.0	48.6	97		1	20	
1,2-Dichloroethane	50.0	50.0	100	70-130		50.0	49.9	100		0	20	
1,1-Dichloroethene	50.0	50.9	102	78-120		50.0	51.9	104		2	20	
cis-1,2-Dichloroethene	50.0	49.0	98	70-125		50.0	50.1	100		2	20	
trans-1,2-Dichloroethene	50.0	51.8	104	70-130		50.0	52.6	105		1	20	
1,2-Dichloropropane	50.0	47.8	96	80-121		50.0	48.7	97		1	20	
cis-1,3-Dichloropropene	50.0	42.7	85	70-130		50.0	43.6	87		2	20	

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Order ID: A09642
Page: 8 of 9
Date: 07/14/22

VM22G13A: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VM22G13A.LCS: 07/13/2022 09		2G13A.LCSD: 07/1	_	=								
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Am	ount			Qualifier	Spike Amount	Result	Rec.	Qualifier			Qualifie
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
rans-1,3-Dichloropropene	50.0	47.0	94	70-132		50.0	47.9	96		2	20	
Ethylbenzene	50.0	51.7	103	80-120		50.0	52.7	105		2	20	
Ethylene Dibromide	50.0	47.3	95	80-120		50.0	48.2	96		1	20	
2-Hexanone	50.0	48.4	97	70-130		50.0	49.4	99		2	20	
sopropylbenzene	50.0	51.8	104	75-125		50.0	53.1	106		2	20	
4-Methyl-2-pentanone	50.0	53.6	107	70-130		50.0	53.9	108		1	20	
Methylene Chloride	50.0	46.6	93	70-130		50.0	47.3	95		2	20	
2-Methylnaphthalene	50.0	48.0	96	70-130		50.0	46.6	93		3	20	
МТВЕ	50.0	48.4	97	70-125		50.0	49.9	100		3	20	
Naphthalene	50.0	46.0	92	70-130		50.0	44.3	89		3	20	
n-Propylbenzene	50.0	52.2	104	70-130		50.0	52.2	104		0	20	
Styrene	50.0	44.1	88	70-130		50.0	44.5	89		1	20	
,1,1,2-Tetrachloroethane	50.0	49.0	98	80-130		50.0	51.0	102		4	20	
,1,2,2-Tetrachloroethane	50.0	52.6	105	70-130		50.0	52.8	106		1	20	
Tetrachloroethene	50.0	52.4	105	70-130		50.0	53.0	106		1	20	
Toluene	50.0	48.3	97	80-120		50.0	48.6	97		0	20	
,2,4-Trichlorobenzene	50.0	50.8	102	70-130		50.0	49.4	99		3	20	
,1,1-Trichloroethane	50.0	44.7	89	70-130		50.0	46.4	93		4	20	
,1,2-Trichloroethane	50.0	48.4	97	75-125		50.0	49.6	99		2	20	
richloroethene	50.0	44.3	89	71-125		50.0	45.9	92		3	20	
richlorofluoromethane	50.0	59.1	118	70-133		50.0	60.0	120		2	20	
,2,3-Trichloropropane	50.0	54.0	108	75-125		50.0	52.0	104		4	20	
,2,3-Trimethylbenzene	50.0	51.2	102	70-130		50.0	50.8	102		0	20	
,2,4-Trimethylbenzene	50.0	52.9	106	75-130		50.0	52.6	105		1	20	
,3,5-Trimethylbenzene	50.0	52.7	105	75-130		50.0	52.9	106		1	20	
/inyl Chloride	50.0	49.1	98	74-125		50.0	51.6	103		5	20	
n&p-Xylene	100	100	100	75-130		100	102	102		2	20	
-Xylene	50.0	49.8	100	80-120		50.0	50.5	101		1	20	
4-Bromofluorobenzene(S)			98	80-120				99				
Dibromofluoromethane(S)			94	80-120				94				
1,2-Dichloroethane-d4(S)			107	80-120				108				
Toluene-d8(S)			98	80-120				97				

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Order ID: A09642 Page: 9 of 9 Date: 07/14/22

Definitions/ Qualifiers:

- U: The analyte was not detected at or above the Reporting Limit (RL).
- *: Value reported is outside QC limits

Exception Summary:

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

Report Generated By:

By Bailey Welch at 3:12 PM, Jul 14, 2022

RSN: VM22G13A-221950714145859

Fibertec environmental services

Analytical Laboratory

1914 Holloway Drive Holf, MI 48842

email: lab@fibertec.us

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8660 S. Mackinaw Trall

Fax: 231 775 8584

Geoprobe

11766 E. Grand River Rd. Brighton, MI 48116 Phone: 810 220 3300

Fax: 810 220 3311

Chain of Custody #

205973 PAGE 1 of 1

Client Nam	e: Arca	dis					PARAMETERS	5	Matrix Code	Deliverables
Contact Pe	rson: St	acey	Jannula						S Soil Gw Ground Water	X Level 2
Project Nar 301	ne/Number		TRW MilAbrd	(agos)		X			A Air Sw Surface Water O Oil ww Waste Water	Level 3
mail distrib	oution list: &	stacey. L	nannula@arcadis.com Cinnis@arcadis.com	MATRIX (SEE RIGHT CORNER FOR CODE)	# OF CONTAINERS	8260		HOLD SAMPLE	P Wipe X Other: Specify	EDD
Quote#				ZE RIGH	N A		411111			
Purchase C	rder# ?	301361	112	TRIX (6	5	VOC				
Date	Time	Sample #		AA	0 #				Remarks:	
7-1122	0943		OW-16D2-071122	6W	3	3			48hr TAT	
-			-OW-D	+						
7-11-22	1042		OW-1602R1_071122	610	3	3			48hr TAT	
7-11-22	1010		FIELD BLANK-071122	QM	3	3			Std TAT	
7-11-28		-	Top Blank			1			TATUE	
						-			Received By	Lab
				7	-	+			JUL 1 1 20	22
									Initials: BF)
Comments										
								C)	lend continued via e	
Stace	elinquished E 4 Han		Sty Heli		e/ Tim • // •		1225 Received B	is 1	7/11/20	upl
alinquishe	d By:	1	H.	Date	e/ Tim	ne	Received B	y:	Stap 7/4/22	121
Relinquishe	Ву	1.		Date 7	Tim)-/-	2 14:45 Religions	(1) (1)	Towers	- 1612
1 bi	us. day	2	bus. days3 bus. days			ous. d		Fibertec pi	roject number: A09642	
5-7 t	ous. days (sto	andard)	Other (specify time/date requirement):						rre upon receipt at Lab: 5. (°C	
			Ple	ase see	e bo	ack	for terms and conditi	ions		



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Chain of Custody # 205973 PAGE | of

Client Name: Avcadis **PARAMETERS** Matrix Code Deliverables Contact Person: Stacy Hannula S Soil GW Ground Water Level 2 Project Name/ Number: Level 3 SW Surface Water 30136112 TRW Milford Email distribution list: Stacey. hannula@arcadis.com john.mcinnis@arcadis.com O Oil ww Waste Water Level 4 8260 x Other: Specify EDD # OF CONTAINERS HOLD Quote# NOC 30136112 Purchase Order# Sample # Time Date Client Sample Descriptor Remarks: 48hr TAT 0943 7-1122 OW-16D2-071122 3 6W OW-1602R1_071122 48hr TAT 7-11-22 1042 3 6W FIELD BLANK-071122 7-11-22 1010 Std TAT (SN 3 Received By Lah Comments: Sampled/Relinquished By: Date/Time Stacey Hannula Date/Time 2 bus, days Fibertec project number: 1 bus, day _3 bus. days _____4 bus. days Temperature upon receipt at Lab: _5-7 bus. days (standard) Other (specify time/date requirement): _ Please see back for terms and conditions



Wednesday, August 10, 2022

Fibertec Project Number:

A10163

Project Identification:

TRW Milford (30136112) /30136112

Submittal Date:

08/08/2022

Ms. Stacey Hannula Arcadis U.S., Inc. - Novi 28550 Cabot Drive Suite 500 Novi, MI 48377

Dear Ms. Hannula,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

By Jacob Sutherlund at 1:59 PM, Aug 10, 2022

of Athelas

For Daryl P. Strandbergh Laboratory Director

Enclosures



Order: Date:

A10163 08/10/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2_080822 Chain of Custody: 206299

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 08/08/22

Client Project No: 30136112 Sample Matrix: Ground Water Collect Time: 09:10

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS

Aliquot ID: A10163-001 Matrix: Ground Water

Method: EPA 5030C/EPA 8260D

Description: OW-16D2_080822

						Prepara	ation	Ana	alysis	
Parameter(s)	Result	Q Ur	nits	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U	μς	g/L	50	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
‡ 2. Acrylonitrile	U	μς	g/L	2.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
3. Benzene	U	μ	g/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
4. Bromobenzene	U	μ	g/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
5. Bromochloromethane	U	μ	g/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
6. Bromodichloromethane	U	μ	g/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
7. Bromoform	U	μ	g/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
8. Bromomethane	U	μ	g/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
9.2-Butanone	U	μς	g/L	25	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
10. n-Butylbenzene	U	μς	g/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
11. sec-Butylbenzene	U	μς	g/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
12. tert-Butylbenzene	U	μς	g/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
13. Carbon Disulfide	U	μς	g/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
14. Carbon Tetrachloride	U	V+ µg	g/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
15. Chlorobenzene	U	μς	g/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
16. Chloroethane	U	μς	g/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
17. Chloroform	U	μς	g/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
18. Chloromethane	U	μς	g/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
19.2-Chlorotoluene	U	μς	g/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U	μς	g/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
21. Dibromochloromethane	U	μς	g/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
22. Dibromomethane	U	μς	g/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
23.1,2-Dichlorobenzene	U	μς	g/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
24.1,3-Dichlorobenzene	U	μς	g/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
25. 1,4-Dichlorobenzene	U	μς	g/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
26. Dichlorodifluoromethane	U	μς	g/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
27.1,1-Dichloroethane	3.6	μς	g/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
28.1,2-Dichloroethane	U	μς	g/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
29. 1,1-Dichloroethene	U	L- µg	g/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
30. cis-1,2-Dichloroethene	16	μς	g/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
31. trans-1,2-Dichloroethene	U	μς	g/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
32.1,2-Dichloropropane	U	μς	g/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
33. cis-1,3-Dichloropropene	U	μς	g/L	0.50	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
34. trans-1,3-Dichloropropene	U	μς	g/L	0.50	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
35. Ethylbenzene	U	μς	g/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
36. Ethylene Dibromide	U	μς	g/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
37.2-Hexanone	U	μς	g/L	50	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC

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Order: A10163 Date: 08/10/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2_080822 Chain of Custody: 206299

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 08/08/22

Client Project No: 30136112 Sample Matrix: Ground Water Collect Time: 09:10

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS

Aliquot ID: A10163-001 Matrix: Ground Water

Method: EPA 5030C/EPA 8260D

Description: OW-16D2_080822

					Prepar	ation	An	alysis	
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
38. Isopropylbenzene	U	μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
39.4-Methyl-2-pentanone	U	μg/L	50	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
40. Methylene Chloride	U	μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
‡ 41.2-Methylnaphthalene	U	μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
42.MTBE	U	μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
43. Naphthalene	U	μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
44. n-Propylbenzene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
45. Styrene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
46.1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
47.1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
48. Tetrachloroethene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
49. Toluene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
50.1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
‡ 52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
53. Trichloroethene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
55.1,2,3-Trichloropropane	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
‡ 56.1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
57.1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
58.1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
59. Vinyl Chloride	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
60. m&p-Xylene	U	μg/L	2.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
61. o-Xylene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
‡ 62. Xylenes	U	μg/L	3.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
Surrogate Summary			Control Limits	Instrument	<u>Batch</u>	Run T	<u>ime</u> <u>Colum</u>	n <u>Inst. Me</u>	ethod
4-Bromofluorobenzene(S)	101	%	80-120	VB	VB22H09A	8/9/2022		VBW	
Dibromofluoromethane(S)	96 404	%	80-120 80-120	VB VB	VB22H09A	8/9/2022 8/9/2022		VBW	
1,2-Dichloroethane-d4(S) Toluene-d8(S)	101 101	% %	80-120 80-120	VB VB	VB22H09A VB22H09A	8/9/2022 8/9/2022		VBW VBW	

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368 F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584



Order: A10163 Date: 08/10/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2R1_080822 Chain of Custody: 206299

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 08/08/22

Description: OW-16D2R1_080822

Client Project No: 30136112 Sample Matrix: Ground Water Collect Time: 09:59

Sample Comments:

Method: EPA 5030C/EPA 8260D

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Aliquot ID: A10163-002 Matrix: Ground Water

						Prepara	ation	Ana	alysis	
Parameter(s)	Result	Q Un	its F	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U	μg	/L	50	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
‡ 2. Acrylonitrile	U	μg	/L	2.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
3. Benzene	U	μg	/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
4. Bromobenzene	U	μg	/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
5. Bromochloromethane	U	μg	/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
6. Bromodichloromethane	U	μg	/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
7. Bromoform	U	μg	/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
8. Bromomethane	U	μg	/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
9.2-Butanone	U	μg	/L	25	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
10. n-Butylbenzene	U	μg	/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
11. sec-Butylbenzene	U	μg	/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
12. tert-Butylbenzene	U	μg	/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
13. Carbon Disulfide	U	μg	/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
14. Carbon Tetrachloride	U	V+ µg	/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
15. Chlorobenzene	U	μg	/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
16. Chloroethane	U	μg	/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
17. Chloroform	U	μg	/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
18. Chloromethane	U	μg	/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
19.2-Chlorotoluene	U	μg	/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U	μg	/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
21. Dibromochloromethane	U	μg	/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
22. Dibromomethane	U	μg	/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
23.1,2-Dichlorobenzene	U	μg	/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
24.1,3-Dichlorobenzene	U	μg	/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
25. 1,4-Dichlorobenzene	U	μg	/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
26. Dichlorodifluoromethane	U	μg	/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
27.1,1-Dichloroethane	2.2	μg	/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
28.1,2-Dichloroethane	U	μg	/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
29.1,1-Dichloroethene	U	L- µg	/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
30. cis-1,2-Dichloroethene	20	μg	/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
31. trans-1,2-Dichloroethene	1.3	μg	/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
32.1,2-Dichloropropane	U	μg	/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
33. cis-1,3-Dichloropropene	U	μд	/L	0.50	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
34. trans-1,3-Dichloropropene	U	μg	/L	0.50	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
35. Ethylbenzene	U	μд	/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
36. Ethylene Dibromide	U	μg	/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
37.2-Hexanone	U	μд	/L	50	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC

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Order: A10163 Date: 08/10/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2R1_080822 Chain of Custody: 206299

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 08/08/22

Client Project No: 30136112 Sample Matrix: Ground Water Collect Time: 09:59

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS

Aliquot ID: A10163-002 Matrix: Ground Water

Method: EPA 5030C/EPA 8260D

Description: OW-16D2R1_080822

					Prepar	ation	An	alysis	
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
38. Isopropylbenzene	U	μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
39.4-Methyl-2-pentanone	U	μg/L	50	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
40. Methylene Chloride	U	μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
‡ 41.2-Methylnaphthalene	U	μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
42. MTBE	U	μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
43. Naphthalene	U	μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
44. n-Propylbenzene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
45. Styrene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
46.1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
47.1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
48. Tetrachloroethene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
49. Toluene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
50.1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
‡ 52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
53. Trichloroethene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
55. 1,2,3-Trichloropropane	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
‡ 56.1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
57.1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
58.1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
59. Vinyl Chloride	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
60. m&p-Xylene	U	μg/L	2.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
61. o-Xylene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
‡ 62. Xylenes	U	μg/L	3.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
Surrogate Summary			Control Limits	Instrume	nt Batch	Run T	ime Colum	nn Inst. Me	ethod
4-Bromofluorobenzene(S)	100	%	80-120	VB	VB22H09A	8/9/2022		VBW	
Dibromofluoromethane(S)	95	%	80-120	VB	VB22H09A	8/9/2022		VBW	
1,2-Dichloroethane-d4(S) Toluene-d8(S)	100 98	% %	80-120 80-120	VB VB	VB22H09A VB22H09A	8/9/2022 8/9/2022		VBW VBW	

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Order: A10163 Date: 08/10/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2R2_080822 Chain of Custody: 206299

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 08/08/22

Description: OW-16D2R2_080822

Client Project No: 30136112 Sample Matrix: Ground Water Collect Time: 11:25

Sample Comments:

Method: EPA 5030C/EPA 8260D

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Aliquot ID: A10163-003 Matrix: Ground Water

						Prepar	ation	Ana	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U		μg/L	50	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
3. Benzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
4. Bromobenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
5. Bromochloromethane	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
6. Bromodichloromethane	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
7. Bromoform	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
8. Bromomethane	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
9.2-Butanone	U		μg/L	25	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
10. n-Butylbenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
11. sec-Butylbenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
12. tert-Butylbenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
13. Carbon Disulfide	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
14. Carbon Tetrachloride	U	V+	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
15. Chlorobenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
16. Chloroethane	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
17. Chloroform	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
18. Chloromethane	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
19. 2-Chlorotoluene	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
21. Dibromochloromethane	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
22. Dibromomethane	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
23.1,2-Dichlorobenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
24.1,3-Dichlorobenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
25.1,4-Dichlorobenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
29.1,1-Dichloroethene	U	L-	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
30. cis-1,2-Dichloroethene	11		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
35. Ethylbenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
36. Ethylene Dibromide	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
37.2-Hexanone	U		μg/L	50	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC

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Order: A1
Date: 08

A10163 08/10/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2R2_080822 Chain of Custody: 206299

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 08/08/22

Client Project No: 30136112 Sample Matrix: Ground Water Collect Time: 11:25

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS

Aliquot ID: A10163-003 Matrix: Ground Water

Method: EPA 5030C/EPA 8260D

Description: OW-16D2R2_080822

						Prepar	ation	Ar	nalysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
38. Isopropylbenzene	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
39.4-Methyl-2-pentanone	U		μg/L	50	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
40. Methylene Chloride	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
‡ 41.2-Methylnaphthalene	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
42.MTBE	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
43. Naphthalene	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
44. n-Propylbenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
45. Styrene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
46.1,1,1,2-Tetrachloroethane	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
47.1,1,2,2-Tetrachloroethane	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
48. Tetrachloroethene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
49. Toluene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
50.1,2,4-Trichlorobenzene	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
51.1,1,1-Trichloroethane	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
52.1,1,2-Trichloroethane	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
53. Trichloroethene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
54. Trichlorofluoromethane	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
55. 1,2,3-Trichloropropane	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
56.1,2,3-Trimethylbenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
57.1,2,4-Trimethylbenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
58.1,3,5-Trimethylbenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
59. Vinyl Chloride	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
60. m&p-Xylene	U		μg/L	2.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
61. o-Xylene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
‡ 62. Xylenes	U		μg/L	3.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
Surrogate Summary				Control Limits	Instrument	<u>Batch</u>	Run T	<u>ime</u> <u>Colur</u>	nn Inst. M	<u>ethod</u>
4-Bromofluorobenzene(S)	100		%	80-120	VB	VB22H09A	8/9/2022		VBW	
Dibromofluoromethane(S)	95		%	80-120	VB	VB22H09A	8/9/2022		VBW	
1,2-Dichloroethane-d4(S) Toluene-d8(S)	99 99		% %	80-120 80-120	VB VB	VB22H09A VB22H09A	8/9/2022 8/9/2022		VBW VBW	

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Order: Date:

08/08/22

Collect Date:

A10163 08/10/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Field Blank_080822 Chain of Custody: 206299

Client Project No: 30136112 Sample Matrix: Blank: Field Collect Time: 11:10

Description: Field Blank_080822

Sample Comments:

Client Project Name:

TRW Milford (30136112)

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Sample No:

Volatile Organic Compounds (VOCs) by GC/MS A10163-004 Matrix: Blank: Field Aliquot ID: Method: EPA 0624.1/EPA 8260D

						Prepara	ation	Ana	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U		μg/L	50	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
3. Benzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
4. Bromobenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
5. Bromochloromethane	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
6. Bromodichloromethane	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
7. Bromoform	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
8. Bromomethane	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
9.2-Butanone	U		μg/L	25	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
10. n-Butylbenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
11. sec-Butylbenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
12. tert-Butylbenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
13. Carbon Disulfide	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
14. Carbon Tetrachloride	U	V+	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
15. Chlorobenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
16. Chloroethane	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
17. Chloroform	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
18. Chloromethane	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
19.2-Chlorotoluene	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
21. Dibromochloromethane	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
22. Dibromomethane	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
23.1,2-Dichlorobenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
29.1,1-Dichloroethene	U	L-	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
35. Ethylbenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
36. Ethylene Dibromide	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
37.2-Hexanone	U		μg/L	50	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC

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Order: A10163 Date: 08/10/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Field Blank_080822 Chain of Custody: 206299

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 08/08/22

Client Project No: 30136112 Sample Matrix: Blank: Field Collect Time: 11:10

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS

Aliquot ID: A10163-004 Matrix: Blank: Field

Method: EPA 0624.1/EPA 8260D

Description: Field Blank_080822

					Prepar	ation	An	alysis	
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
38. Isopropylbenzene	U	μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
39.4-Methyl-2-pentanone	U	μg/L	50	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
40. Methylene Chloride	U	μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
‡ 41.2-Methylnaphthalene	U	μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
42.MTBE	U	μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
43. Naphthalene	U	μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
44. n-Propylbenzene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
45. Styrene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
46.1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
47.1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
48. Tetrachloroethene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
49. Toluene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
50. 1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
‡ 52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
53. Trichloroethene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
55. 1,2,3-Trichloropropane	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
‡ 56.1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
57. 1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
58. 1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
59. Vinyl Chloride	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
60. m&p-Xylene	U	μg/L	2.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
61. o-Xylene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
‡ 62. Xylenes	U	μg/L	3.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
Surrogate Summary			Control Limits	Instrument	<u>Batch</u>	Run T	<u>ime</u> <u>Colum</u>	n <u>Inst. Me</u>	ethod
4-Bromofluorobenzene(S)	98	%	80-120	VB	VB22H09A	8/9/2022	12:43 1	VBW	AT
Dibromofluoromethane(S)	95	%	80-120	VB	VB22H09A	8/9/2022		VBW.	
1,2-Dichloroethane-d4(S)	102	% %	80-120 80-120	VB VB	VB22H09A	8/9/2022 8/9/2022		VBW.	
Toluene-d8(S)	100	%	00-120	VB	VB22H09A	0/9/2022	12.43	VBW.	ΑI

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Order: A10163 Date: 08/10/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Trip Blank Chain of Custody: 206299

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 08/08/22

Client Project No: 30136112 Sample Matrix: Blank: Trip Collect Time: NA

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS

Aliquot ID: A10163-005 Matrix: Blank: Trip

Method: EPA 5030C/EPA 8260D

Description: Trip Blank

						Prepai			alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	In
1. Acetone	U		μg/L	50	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	. SN
2. Acrylonitrile	U		μg/L	2.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	18 i
3. Benzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	SN
4. Bromobenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	. SI
5. Bromochloromethane	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	SI
6. Bromodichloromethane	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	. SI
7. Bromoform	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	S
8. Bromomethane	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	S
9.2-Butanone	U		μg/L	25	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	S
10. n-Butylbenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	S
11. sec-Butylbenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	S
12. tert-Butylbenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	S
13. Carbon Disulfide	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	S
14. Carbon Tetrachloride	U	V+	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	S
15. Chlorobenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	S
16. Chloroethane	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	. 5
17. Chloroform	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	S
18. Chloromethane	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	S
19.2-Chlorotoluene	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	S
20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	S
21. Dibromochloromethane	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	. 8
22. Dibromomethane	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	. 8
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	. 8
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	. 8
25.1,4-Dichlorobenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	. 8
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	. 8
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	. 8
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	. 8
29.1,1-Dichloroethene	U	L-	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	. 8
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	. 8
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	. 5
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	. 5
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	08/09/22		08/09/22 13:08		
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	. 8
35. Ethylbenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	S
36. Ethylene Dibromide	U		μg/L	1.0	1.0	08/09/22		08/09/22 13:08		
37.2-Hexanone	U		μg/L	50	1.0	08/09/22	\/D00L100A	08/09/22 13:08	VDOOLIOOA	_

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F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584



Order: A10163 Date: 08/10/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Trip Blank Chain of Custody: 206299

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 08/08/22

Client Project No: 30136112 Sample Matrix: Blank: Trip Collect Time: NA

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS

Aliquot ID: A10163-005 Matrix: Blank: Trip

Method: EPA 5030C/EPA 8260D

Description: Trip Blank

Preparation Analysis Parameter(s) Result Q Units Reporting Limit Dilution P. Date P. Batch A. Date A. Batch Init. 38. Isopropylbenzene U μg/L 5.0 1.0 08/09/22 VB22H09A 08/09/22 13:08 VB22H09A SNC 39.4-Methyl-2-pentanone U 50 1.0 08/09/22 VB22H09A 08/09/22 13:08 VB22H09A SNC µg/L 40. Methylene Chloride U 08/09/22 08/09/22 13:08 VB22H09A μg/L 5.0 1.0 VB22H09A U # 41.2-Methylnaphthalene 5.0 1.0 08/09/22 VB22H09A 08/09/22 13:08 VB22H09A SNC μg/L U μg/L 42. MTBE 5.0 1.0 08/09/22 VB22H09A 08/09/22 13:08 VB22H09A SNC U 43. Naphthalene µg/L 5.0 1.0 08/09/22 VB22H09A 08/09/22 13:08 VB22H09A SNC 44. n-Propylbenzene U 1.0 1.0 08/09/22 VB22H09A 08/09/22 13:08 VB22H09A SNC μg/L 45. Styrene U μg/L 1.0 1.0 08/09/22 VB22H09A 08/09/22 13:08 VB22H09A SNC U 1.0 1.0 08/09/22 VB22H09A 08/09/22 13:08 VB22H09A SNC 46. 1.1.1.2-Tetrachloroethane μg/L U 47.1,1,2,2-Tetrachloroethane 1.0 1.0 08/09/22 VB22H09A 08/09/22 13:08 VB22H09A SNC µg/L U 48. Tetrachloroethene μg/L 1.0 1.0 08/09/22 VB22H09A 08/09/22 13:08 VB22H09A SNC 49. Toluene U 1.0 1.0 08/09/22 VB22H09A 08/09/22 13:08 VB22H09A SNC μg/L U 50. 1.2.4-Trichlorobenzene 5.0 1 0 08/09/22 VB22H09A 08/09/22 13:08 VB22H09A SNC μg/L U 51.1,1,1-Trichloroethane μg/L 1.0 1.0 08/09/22 VB22H09A 08/09/22 13:08 VB22H09A SNC U 08/09/22 ‡ 52.1,1,2-Trichloroethane μg/L 1.0 1.0 VB22H09A 08/09/22 13:08 VB22H09A SNC U 53. Trichloroethene µq/L 1.0 1.0 08/09/22 VB22H09A 08/09/22 13:08 VB22H09A SNC U 1.0 54. Trichlorofluoromethane μg/L 1.0 08/09/22 VB22H09A 08/09/22 13:08 VB22H09A SNC 55. 1,2,3-Trichloropropane U 1.0 1.0 08/09/22 VB22H09A 08/09/22 13:08 VB22H09A SNC μg/L ‡ 56.1,2,3-Trimethylbenzene U μg/L 1.0 1.0 08/09/22 VB22H09A 08/09/22 13:08 VB22H09A SNC U 1.0 08/09/22 VB22H09A 08/09/22 13:08 VB22H09A SNC 57. 1,2,4-Trimethylbenzene 1.0 μg/L 58.1,3,5-Trimethylbenzene U μg/L 1.0 1.0 08/09/22 VB22H09A 08/09/22 13:08 VB22H09A SNC 59. Vinyl Chloride U 1.0 1.0 VB22H09A 08/09/22 13:08 VB22H09A SNC μg/L 08/09/22 60. m&p-Xylene U 2.0 1.0 08/09/22 VB22H09A 08/09/22 13:08 VB22H09A SNC μg/L 61. o-Xylene U 1.0 1.0 08/09/22 VB22H09A 08/09/22 13:08 VB22H09A SNC µg/L U VB22H09A 08/09/22 13:08 VB22H09A SNC ‡ 62. Xylenes μg/L 3.0 1.0 08/09/22 **Surrogate Summary Control Limits** Instrument Run Time <u>Column</u> Inst. Method Batch 4-Bromofluorobenzene(S) 98 % 80-120 VΒ VB22H09A 8/9/2022 13:08 **VBWAT VBWAT** Dibromofluoromethane(S) 94 % 80-120 VR. VB22H09A 8/9/2022 13:08 1 1,2-Dichloroethane-d4(S) 100 % 80-120 VΒ VB22H09A 8/9/2022 13:08 1 **VBWAT** Toluene-d8(S) 101 % 80-120 VΒ VB22H09A 8/9/2022 13:08 **VBWAT**

> 1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail

Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368 F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584



Analytical Laboratory Report Laboratory Project Number: A10163

Order: A10163 Date: 08/10/22

Definitions/ Qualifiers:

- A: Spike recovery or precision unusable due to dilution.
- **B:** The analyte was detected in the associated method blank.
- E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
- J: The concentration is an estimated value.
- M: Modified Method
- **U:** The analyte was not detected at or above the reporting limit.
- X: Matrix Interference has resulted in a raised reporting limit or distorted result.
- **W:** Results reported on a wet-weight basis.
- *: Value reported is outside QC limits
- **D:** The sample or extract was analyzed at a DF greater than 1.

Exception Summary:

L : Recovery in the associated laboratory sample (LCS) exceeds the lower control limit. Results may be biased low.
 V+
 : Recovery in the associated continuing calibration verification sample (CCV) exceeds the upper control limit. Results

may be biased high.

Analysis Locations:

All analyses performed in Holt.



Accreditation Number(s):

T104704518-19-8 (TX)



Order ID: A10163 Page: 1 of 5 Date: 08/10/22

VB22H09A: Method Blank (MB)

VBZZI 109A. IVIELI IOU BIATIK (IVIB)						LFA 020
Run Time: VB22H09A.MB 08/09/2022 12:18	3 [VB22H09A]					
	MB Result	MB	MB RDL			
		Qualifier				
Analyte	μg/L		μg/L			
Acetone	U		50			
Acrylonitrile	U		2.0			
Benzene	U		1.0			
Bromobenzene	U		1.0			
Bromochloromethane	U		1.0			
Bromodichloromethane	U		1.0			
Bromoform	U		1.0			
Bromomethane	U		5.0			
2-Butanone	U		25			
n-Butylbenzene	U		1.0			
sec-Butylbenzene	U		1.0			
tert-Butylbenzene	U		1.0			
Carbon Disulfide	U		5.0			
Carbon Tetrachloride	U		1.0			
Chlorobenzene	U		1.0			
Chloroethane	U		5.0			
Chloroform	U		1.0			
Chloromethane	U		5.0			
2-Chlorotoluene	U		5.0			
1,2-Dibromo-3-chloropropane (SIM)	U		1.0			
Dibromochloromethane	U		5.0			
Dibromomethane	U		5.0			
1,2-Dichlorobenzene	U		1.0			
1,3-Dichlorobenzene	U		1.0			
I,4-Dichlorobenzene	U		1.0			
Dichlorodifluoromethane	U		5.0			
I,1-Dichloroethane	U		1.0			
I,2-Dichloroethane	U		1.0			
1,1-Dichloroethene	U		1.0			
cis-1,2-Dichloroethene	U		1.0			
rans-1,2-Dichloroethene	U		1.0			
1,2-Dichloropropane	U		1.0			
cis-1,3-Dichloropropene	U		0.50			
	1914 Holloway Drive	10	Holt, MI 48842	T: (517) 699-0345	F: (517) 699-0388	
	1914 Holloway Drive		Brighton, MI 48116	T: (810) 220-3300	F: (810) 220-3311	
	11700 L. Grana Nive		C I'll All 10001	T (224) 775 0260	F (224) 775 0504	

8660 S. Mackinaw Trail

DCSID: G-6017.2 (06/10/2020)

Cadillac, MI 49601

F: (231) 775-8584

T: (231) 775-8368



Order ID: A10163 Page: 2 of 5 Date: 08/10/22

VB22H09A: Method Blank (MB)

Run Time: VB22H09A.MB 08/09/2022 12:18 [VB22H09	9A]		
	MB Result	MB	MB RDL
		Qualifier	
Analyte	μg/L		μg/L
trans-1,3-Dichloropropene	U		0.50
Ethylbenzene	U		1.0
Ethylene Dibromide	U		1.0
2-Hexanone	U		50
Isopropylbenzene	U		5.0
4-Methyl-2-pentanone	U		50
Methylene Chloride	U		5.0
2-Methylnaphthalene	U		5.0
MTBE	U		5.0
Naphthalene	U		5.0
n-Propylbenzene	U		1.0
Styrene	U		1.0
1,1,1,2-Tetrachloroethane	U		1.0
1,1,2,2-Tetrachloroethane	U		1.0
Tetrachloroethene	U		1.0
Toluene	U		1.0
1,2,4-Trichlorobenzene	U		5.0
1,1,1-Trichloroethane	U		1.0
1,1,2-Trichloroethane	U		1.0
Trichloroethene	U		1.0
Trichlorofluoromethane	U		1.0
1,2,3-Trichloropropane	U		1.0
1,2,3-Trimethylbenzene	U		1.0
1,2,4-Trimethylbenzene	U		1.0
1,3,5-Trimethylbenzene	U		1.0
Vinyl Chloride	U		1.0
m&p-Xylene	U		2.0
o-Xylene	U		1.0
4-Bromofluorobenzene(S)	100		80-120
Dibromofluoromethane(S)	96		80-120
1,2-Dichloroethane-d4(S)	99		80-120
Toluene-d8(S)	99		80-120

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order ID: A10163 Page: 3 of 5 Date: 08/10/22

VB22H09A: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VB22H09A.LCS: 08/09/2022 11:04	1 [VB22H09A] VB22	2H09A.LCSD: 08/09	/2022 11:28 [V	B22H09A]								
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Am	ount			Qualifier	Spike Amou	ınt Result	Rec.	Qualifier			Qualifier
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
Acetone	50.0	22.2	44	40-130		50.0	20.6	41		7	20	
Acrylonitrile	50.0	49.0	98	70-130		50.0	49.5	99		1	20	
Benzene	50.0	48.6	97	80-120		50.0	46.4	93		4	20	
Bromobenzene	50.0	45.7	91	75-125		50.0	45.1	90		1	20	
Bromochloromethane	50.0	50.7	101	70-130		50.0	49.7	99		2	20	
Bromodichloromethane	50.0	56.6	113	75-120		50.0	55.6	111		2	20	
Bromoform	50.0	50.9	102	70-130		50.0	49.9	100		2	20	
Bromomethane	50.0	56.4	113	68-135		50.0	52.9	106		6	20	
2-Butanone	50.0	32.3	65	40-129		50.0	32.7	65		0	20	
n-Butylbenzene	50.0	49.9	100	70-133		50.0	47.6	95		5	20	
sec-Butylbenzene	50.0	51.3	103	70-125		50.0	49.2	98		5	20	
ert-Butylbenzene	50.0	50.0	100	70-130		50.0	48.2	96		4	20	
Carbon Disulfide	50.0	57.5	115	70-130		50.0	55.8	112		3	20	
Carbon Tetrachloride	50.0	57.8	116	70-130		50.0	54.0	108		7	20	
Chlorobenzene	50.0	51.2	102	80-120		50.0	48.9	98		4	20	
Chloroethane	50.0	53.0	106	61-130		50.0	48.5	97		9	20	
Chloroform	50.0	51.5	103	80-120		50.0	49.4	99		4	20	
Chloromethane	50.0	50.5	101	67-125		50.0	46.6	93		8	20	
2-Chlorotoluene	50.0	47.2	94	75-125		50.0	46.6	93		1	20	
1,2-Dibromo-3-chloropropane (SIM)	50.0	51.6	103	70-130		50.0	55.3	111		7	20	
Dibromochloromethane	50.0	56.4	113	70-130		50.0	56.2	112		1	20	
Dibromomethane	50.0	51.6	103	75-125		50.0	50.3	101		2	20	
1,2-Dichlorobenzene	50.0	49.2	98	70-120		50.0	49.0	98		0	20	
1,3-Dichlorobenzene	50.0	49.3	99	75-125		50.0	48.7	97		2	20	
1,4-Dichlorobenzene	50.0	47.5	95	75-125		50.0	46.4	93		2	20	
Dichlorodifluoromethane	50.0	60.0	120	70-136		50.0	54.9	110		9	20	
1,1-Dichloroethane	50.0	48.6	97	70-130		50.0	45.6	91		6	20	
1,2-Dichloroethane	50.0	45.0	90	70-130		50.0	44.2	88		2	20	
1,1-Dichloroethene	50.0	42.3	85	78-120		50.0	38.3	77	*	10	20	
cis-1,2-Dichloroethene	50.0	47.3	95	70-125		50.0	45.5	91		4	20	
rans-1,2-Dichloroethene	50.0	46.6	93	70-130		50.0	43.1	86		8	20	
1,2-Dichloropropane	50.0	51.1	102	80-121		50.0	49.0	98		4	20	
cis-1,3-Dichloropropene	50.0	53.4	107	70-130		50.0	53.2	106		1	20	

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order ID: A10163 Page: 4 of 5 Date: 08/10/22

VB22H09A: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VB22H09A.LCS: 08/09/2022 11	I:04 [VB22H09A] VB22	H09A.LCSD: 08/09	=	B22H09A]								
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Amo	ount			Qualifier	Spike Amou	ınt Result	Rec.	Qualifier			Qualifie
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
rans-1,3-Dichloropropene	50.0	55.4	111	70-132		50.0	53.4	107		4	20	
Ethylbenzene	50.0	53.4	107	80-120		50.0	50.1	100		7	20	
Ethylene Dibromide	50.0	51.5	103	80-120		50.0	51.4	103		0	20	
2-Hexanone	50.0	36.5	73	70-130		50.0	37.0	74		1	20	
lsopropylbenzene	50.0	52.7	105	75-125		50.0	49.7	99		6	20	
4-Methyl-2-pentanone	50.0	52.4	105	70-130		50.0	51.6	103		2	20	
Methylene Chloride	50.0	39.4	79	70-130		50.0	37.9	76		4	20	
2-Methylnaphthalene	50.0	49.1	98	70-130		50.0	51.9	104		6	20	
МТВЕ	50.0	50.6	101	70-125		50.0	49.2	98		3	20	
Naphthalene	50.0	47.4	95	70-130		50.0	51.3	103		8	20	
n-Propylbenzene	50.0	50.9	102	70-130		50.0	49.8	100		2	20	
Styrene	50.0	49.0	98	70-130		50.0	48.0	96		2	20	
1,1,1,2-Tetrachloroethane	50.0	58.0	116	80-130		50.0	56.3	113		3	20	
1,1,2,2-Tetrachloroethane	50.0	51.2	102	70-130		50.0	51.2	102		0	20	
Tetrachloroethene	50.0	53.3	107	70-130		50.0	50.0	100		7	20	
Toluene	50.0	50.8	102	80-120		50.0	48.7	97		5	20	
1,2,4-Trichlorobenzene	50.0	49.9	100	70-130		50.0	50.8	102		2	20	
1,1,1-Trichloroethane	50.0	57.5	115	70-130		50.0	54.7	109		5	20	
1,1,2-Trichloroethane	50.0	53.2	106	75-125		50.0	51.7	103		3	20	
Trichloroethene	50.0	50.7	101	71-125		50.0	48.6	97		4	20	
Trichlorofluoromethane	50.0	56.7	113	70-133		50.0	53.8	108		5	20	
1,2,3-Trichloropropane	50.0	48.7	97	75-125		50.0	51.6	103		6	20	
1,2,3-Trimethylbenzene	50.0	47.1	94	70-130		50.0	46.5	93		1	20	
1,2,4-Trimethylbenzene	50.0	51.3	103	75-130		50.0	50.6	101		2	20	
1,3,5-Trimethylbenzene	50.0	50.3	101	75-130		50.0	49.7	99		2	20	
/inyl Chloride	50.0	51.0	102	74-125		50.0	48.2	96		6	20	
m&p-Xylene	100	104	104	75-130		100	99.6	100		4	20	
o-Xylene	50.0	49.4	99	80-120		50.0	47.5	95		4	20	
4-Bromofluorobenzene(S)			101	80-120				101				
Dibromofluoromethane(S)			103	80-120				103				
1,2-Dichloroethane-d4(S)			101	80-120				100				
Toluene-d8(S)			100	80-120				100				

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order ID: A10163
Page: 5 of 5
Date: 08/10/22

Definitions/ Qualifiers:

- U: The analyte was not detected at or above the Reporting Limit (RL).
- *: Value reported is outside QC limits

Exception Summary:

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

Report Generated By:

By Jacob Sutherlund at 2:06 PM, Aug 10, 2022

RSN: VB22H09A-222220810140431



Analytical Laboratory

1914 Holloway Drive Holt, MI 48842 8660 S. Mackinaw Trail Cadillac, MI 49601

Phone: 517 699 0345 Fax: 517 699 0388

Phone: 231 775 8368

Fax: 231 775 8584

Geoprobe

11766 E. Grand River Rd. Brighton, MI 48116

Phone: 810 220 3300 Fax: 810 220 3311 Chain of Custody # 206299

			email: lab@fibertec.us													
Client Name: AVCadis					PARAMETERS						Matrix Code Deliverables					
			Hannula									S Soil Gw Ground Water X Level 2				
Project Name / No	umbor	J										A Air SW Surface Water Level 3				
30136	112	TE	2W Milford	CODE)		0				ш	<u> </u>	O Oil ww Waste Water Level 4				
Email distribution	list: St	acey. h	lannula@arcadis.com cinnis@arcadis.com	MATRIX (SEE RIGHT CORNER FOR CODE)	# OF CONTAINERS	8260F				HIGMAN	OLD SAW	P Wipe X Other: Specify EDD				
Quote#				(SEE RIG	N Y	8										
Purchase Order#	‡ 3	01361	12	T XIX	N N	700										
	īme	Sample #	Client Sample Descriptor		+	+ +		4			-	Remarks:				
5.8.22 09			OW-16D2-080822	6W	3	*		_			4	NSWIAT				
8.8.22 09	159		OW-16D2R1-080822	GW	3	*						WShTAT				
88.22 11	25		OW-16D2R2-080822	6W	3	X						rush TAT				
8822 111	0		FIELDBLANK-080822	%	3	×				1		Std. TAT OR				
			TRIPBLANKZ	X	3	X						Std. TAT OR				
		-	pH dest kit		1			-				from ow. 16D2RI Sample				
											+	Received By Lab				
						\Box		1			1	AUG 0 8 2022				
Comments:											,	Initials: 35				
Sampled/Relinquished By: Stacey Harrivola 8 Sty All, / Arcadis				Date/Time 8.8.22 1240 Received						is Acath						
Relinquished By:	40	X	utt		e/ Tim			Red	eWald By:	1	1	hal 8/8/22 5125				
Relinquisped by:	1	500	M	12/1	/ Tim		18:30	RE	eived By L	aboratory:	<	2				
a a			naround Time ALL RESULTS WILL BE SENT BY THE END C	FYHER	ESIMP	95 DA	Y	/				LAB USE ONLY				
1 bus. day3 bus. days				_	4 bus. days					Fibertec project number:						
5-7 bus. d	lays (star	ndard)	Other (specify time/date requirement):								ure	e upon receipt at Lab: On Ice				
			Pleas	se se	e bo	ack	for terms c	nd c	ondition	ns .						



Tuesday, September 13, 2022

Fibertec Project Number: A10763

Project Identification: TRW Milford (30136112) /30136112

Submittal Date: 09/08/2022

Ms. Stacey Hannula Arcadis U.S., Inc. - Novi 28550 Cabot Drive Suite 500 Novi, MI 48377

Dear Ms. Hannula,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

By Bailey Welch at 4:59 PM, Sep 13, 2022

Bailey Welch

For Daryl P. Strandbergh Laboratory Director

Enclosures



Order: Date:

A10763 09/13/22

OW-16D2_090822 212794 Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Chain of Custody:

TRW Milford (30136112) 09/08/22 Client Project Name: Sample No: Collect Date:

Description:

OW-16D2_090822

Client Project No: 30136112 Sample Matrix: **Ground Water** Collect Time: 09:20

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Aliquot ID: A10763-001 Matrix: Ground Water Method: EPA 5030C/EPA 8260D

Preparation Analysis Parameter(s) Result O Units Reporting Limit Dilution P. Date P. Batch A. Date A. Batch Init 1. Acetone U μg/L 50 1.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A SNC ± 2. Acrylonitrile U 2.0 10 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A SNC μg/L 3. Benzene U 1.0 1.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A SNC μg/L U 1.0 1 0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A SNC 4 Bromobenzene μg/L U 1.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A SNC 5. Bromochloromethane μg/L 1.0 U 6. Bromodichloromethane μg/L 10 10 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A SNC 7. Bromoform (SIM) U 1.0 1.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A ua/L U 5.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A 8. Bromomethane μg/L 10 SNC 9.2-Butanone U 25 1.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A ua/L U 10. n-Butylbenzene 1.0 1.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A SNC μg/L 11. sec-Butylbenzene U 1.0 1.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A μg/L SNC 12. tert-Butylbenzene U 1.0 1.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A SNC μg/L U 5.0 09/09/22 09/09/22 13:41 VM22I09A SNC 13 Carbon Disulfide µg/L 10 VM22I09A 14. Carbon Tetrachloride U 1.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A μg/L 1.0 15 Chlorobenzene u 1.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A SNC 10 μg/L 16. Chloroethane U 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A μg/L 5.0 1.0 09/09/22 17 Chloroform U 1.0 1.0 VM22I09A 09/09/22 13:41 VM22I09A SNC μg/L U 09/09/22 13:41 VM22I09A 18. Chloromethane 5.0 1.0 09/09/22 VM22I09A ua/L 19. 2-Chlorotoluene U 5.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A SNC μg/L 10 ‡ 20.1,2-Dibromo-3-chloropropane (SIM) U μg/L 1.0 1.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A U 21. Dibromochloromethane μg/L 5.0 1.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A 22. Dibromomethane U μg/L 5.0 1.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A SNC 23. 1,2-Dichlorobenzene U 1.0 1.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A SNC μg/L U 1.0 1.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A 24 1 3-Dichlorobenzene SNC μg/L 25. 1,4-Dichlorobenzene U 1.0 1.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A SNC μg/L U 26 Dichlorodifluoromethane 5.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A SNC μg/L 10 27. 1.1-Dichloroethane 3.9 μg/L 1.0 1.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A SNC U 28. 1.2-Dichloroethane 10 10 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A SNC μg/L U 09/09/22 13:41 VM22I09A SNC 29. 1,1-Dichloroethene 1.0 1.0 09/09/22 VM22I09A ua/L 21 09/09/22 09/09/22 13:41 VM22I09A 30 cis-1 2-Dichloroethene μg/L 10 1.0 VM22I09A SNC 31. trans-1,2-Dichloroethene 1.8 1.0 1.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A SNC ua/L 32. 1,2-Dichloropropane U 1.0 1.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A SNC μg/L 33. cis-1,3-Dichloropropene U 0.50 1.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A SNC μg/L 34. trans-1,3-Dichloropropene U 0.50 1.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A μg/L U 09/09/22 35. Ethylbenzene μg/L 10 10 VM22I09A 09/09/22 13:41 VM22I09A SNC 36. Ethylene Dibromide U 1.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A μg/L 1.0 U VM22I09A 09/09/22 13:41 VM22I09A SNC 37 2-Hexanone μg/L 50 1.0 09/09/22

> 1914 Holloway Drive 11766 E Grand River 8660 S Madkinaw Trail

Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601

T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order: A10763 Date: 09/13/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2_090822 Chain of Custody: 212794

 Client Project Name:
 TRW Milford (30136112)
 Sample No:
 Collect Date:
 09/08/22

Description: OW-16D2_090822

Client Project No: 30136112 Sample Matrix: Ground Water Collect Time: 09:20

Sample Comments:

Method: EPA 5030C/EPA 8260D

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Aliquot ID: A10763-001 Matrix: Ground Water

					Prepar	ation	Analysis		
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
38. Isopropylbenzene	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC
39. 4-Methyl-2-pentanone	U	μg/L	50	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC
40. Methylene Chloride	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC
‡ 41.2-Methylnaphthalene	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC
42. MTBE	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC
43. Naphthalene	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC
44. n-Propylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC
45. Styrene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC
46. 1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC
47.1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC
48. Tetrachloroethene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC
49. Toluene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC
50. 1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC
‡ 52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC
53. Trichloroethene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC
55. 1,2,3-Trichloropropane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC
‡ 56.1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC
57. 1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC
58. 1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC
59. Vinyl Chloride	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC
60. m&p-Xylene	U	μg/L	2.0	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC
61. o-Xylene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC
‡ 62. Xylenes	U	μg/L	3.0	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC



Order: A10763 Date: 09/13/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2R1_090822 Chain of Custody: 212794

 Client Project Name:
 TRW Milford (30136112)
 Sample No:
 Collect Date:
 09/08/22

Client Project No: 30136112 Sample Matrix: Ground Water Collect Time: 10:07

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Aliquot ID: A10763-002 Matrix: Ground Water

Method: EPA 5030C/EPA 8260D Description: OW-16D2R1_090822

					Prepara	ation	Analysis		
Parameter(s)	Result	Q Unit	s Reporting Limit	Dilution	P. Date	P. Batch	A. Date 09/09/22 14:10	A. Batch VM22I09A	Init
1. Acetone		μg/l	. 50	1.0	09/09/22	VM22I09A			
2. Acrylonitrile	U	μg/l	2.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SN
3. Benzene	U	μg/l	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SN
4. Bromobenzene	U	μg/l	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SI
5. Bromochloromethane	U	μg/l	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	. 81
6. Bromodichloromethane	U	μg/l	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SI
7. Bromoform (SIM)	U	μg/l	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
8. Bromomethane	U	μg/l	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
9.2-Butanone	U	μg/L	. 25	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
10. n-Butylbenzene	U	μg/l	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
11. sec-Butylbenzene	U	μg/l	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
12. tert-Butylbenzene	U	μg/l	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
13. Carbon Disulfide	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
14. Carbon Tetrachloride	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
15. Chlorobenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
16. Chloroethane	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
17. Chloroform	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
18. Chloromethane	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
19.2-Chlorotoluene	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
20.1,2-Dibromo-3-chloropropane (SIM)	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
21. Dibromochloromethane	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
22. Dibromomethane	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
23. 1,2-Dichlorobenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
24. 1,3-Dichlorobenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
25. 1,4-Dichlorobenzene	U	μg/l	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
26. Dichlorodifluoromethane	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
27.1,1-Dichloroethane	2.5	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
28. 1,2-Dichloroethane	U	μg/l	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
29. 1,1-Dichloroethene	U	μg/l	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
30. cis-1,2-Dichloroethene	22	μg/l	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
31. trans-1,2-Dichloroethene	1.4	μg/l	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
32. 1,2-Dichloropropane	U	μg/l	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
33. cis-1,3-Dichloropropene	U	μg/L	0.50	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
34. trans-1,3-Dichloropropene	U	μg/L	0.50	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
35. Ethylbenzene	U	μg/l	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
36. Ethylene Dibromide	U	μg/L	. 1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
37.2-Hexanone	U	μg/L	_ 50	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S

1914 Holloway Drive 11766 E Grand River 8660 S Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order: A10763 Date: 09/13/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2R1_090822 Chain of Custody: 212794

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 09/08/22

Client Project No: 30136112 Sample Matrix: Ground Water Collect Time: 10:07

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Aliquot ID: A10763-002 Matrix: Ground Water

Method: EPA 5030C/EPA 8260D Description: OW-16D2R1_090822

WIELIIOU. EPA 3030C/EPA 6260D		Description: OW-16D2R1_090622												
					Prepar			alysis						
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init					
38. Isopropylbenzene	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SNO					
39. 4-Methyl-2-pentanone	U	μg/L	50	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SNO					
40. Methylene Chloride	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SNO					
‡ 41.2-Methylnaphthalene	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SNO					
42. MTBE	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SNO					
43. Naphthalene	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SNO					
44. n-Propylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SNO					
45. Styrene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SNO					
46. 1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SNO					
47. 1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SN					
48. Tetrachloroethene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SN					
49. Toluene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SN					
50. 1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SN					
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SN					
52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SN					
53. Trichloroethene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SNO					
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SN					
55. 1,2,3-Trichloropropane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SN					
56.1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SN					
57.1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SNO					
58. 1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SNO					
59. Vinyl Chloride	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SNO					
60. m&p-Xylene	U	μg/L	2.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SNO					
61. o-Xylene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SNO					
\$ 62. Xylenes	U	μg/L	3.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SNO					

lab@fibertec.us



Order: A
Date: 09

A10763 09/13/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2R2_090822 Chain of Custody: 212794

 Client Project Name:
 TRW Milford (30136112)
 Sample No:
 Collect Date:
 09/08/22

Client Project No: 30136112 Sample Matrix: Ground Water Collect Time: 10:55

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Aliquot ID: A10763-003 Matrix: Ground Water

Method: EPA 5030C/EPA 8260D Description: OW-16D2R2_090822

					Prepai	ation	An	alysis	
Parameter(s)	Result	Q Unit	s Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U	μg/l	. 50	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNO
‡ 2. Acrylonitrile	U	μg/l	2.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNO
3. Benzene	U	μg/l	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNO
4. Bromobenzene	U	μg/l	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNO
5. Bromochloromethane	U	μg/l	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNO
6. Bromodichloromethane	U	μg/l	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNO
‡ 7. Bromoform (SIM)	U	μg/l	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNO
8. Bromomethane	U	μg/l	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNO
9. 2-Butanone	U	μg/l	. 25	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNO
10. n-Butylbenzene	U	μg/l	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNO
11. sec-Butylbenzene	U	μg/l	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNO
12. tert-Butylbenzene	U	μg/l	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNO
13. Carbon Disulfide	U	μg/l	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNO
14. Carbon Tetrachloride	U	μg/l	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNO
15. Chlorobenzene	U	μg/l	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SN
16. Chloroethane	U	μg/l	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SN
17. Chloroform	U	μg/l	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SN
18. Chloromethane	U	μg/l	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SN
19. 2-Chlorotoluene	U	μg/l	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SN
20.1,2-Dibromo-3-chloropropane (SIM)	U	μg/l	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SN
21. Dibromochloromethane	U	μg/l	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SN
22. Dibromomethane	U	μg/l	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SN
23. 1,2-Dichlorobenzene	U	μg/l	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SN
24. 1,3-Dichlorobenzene	U	μg/l	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SN
25. 1,4-Dichlorobenzene	U	μg/l	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SN
26. Dichlorodifluoromethane	U	μg/l	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SN
27.1,1-Dichloroethane	U	μg/l	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SN
28. 1,2-Dichloroethane	U	μg/l	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SN
29. 1,1-Dichloroethene	U	μg/l	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SN
30. cis-1,2-Dichloroethene	12	μg/l	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SN
31. trans-1,2-Dichloroethene	U	μg/l	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SN
32.1,2-Dichloropropane	U	μg/l	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SN
33. cis-1,3-Dichloropropene	U	μg/l	0.50	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SN
34. trans-1,3-Dichloropropene	U	μg/l	0.50	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SN
35. Ethylbenzene	U	μg/l	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SN
36. Ethylene Dibromide	U	μg/l	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SN
37. 2-Hexanone	U	μg/l	_ 50	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNO

1914 Holloway Drive 11766 E Grand River 8660 S Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order: A
Date: 09

A10763 09/13/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2R2_090822 Chain of Custody: 212794

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 09/08/22

Client Project No: 30136112 Sample Matrix: Ground Water Collect Time: 10:55

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Aliquot ID: A10763-003 Matrix: Ground Water

Method: EPA 5030C/EPA 8260D Description: OW-16D2R2_090822

				оприот о					
					Prepar			alysis	
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init
38. Isopropylbenzene	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNO
39. 4-Methyl-2-pentanone	U	μg/L	50	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNO
40. Methylene Chloride	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNO
‡ 41.2-Methylnaphthalene	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNO
42. MTBE	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SN
43. Naphthalene	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SN
44. n-Propylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SN
45. Styrene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SN
46. 1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SN
47. 1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SN
48. Tetrachloroethene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SN
49. Toluene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SN
50. 1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SN
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SN
52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SN
53. Trichloroethene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SN
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SN
55. 1,2,3-Trichloropropane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SN
56. 1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SN
57. 1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SN
58. 1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SN
59. Vinyl Chloride	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SN
60. m&p-Xylene	U	μg/L	2.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SN
61. o-Xylene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SN
‡ 62. Xylenes	U	μg/L	3.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SN



Order: A
Date: 0

A10763 09/13/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: TRIP BLANK Chain of Custody: 212794

 Client Project Name:
 TRW Milford (30136112)
 Sample No:
 Collect Date:
 09/08/22

Client Project No: 30136112 Sample Matrix: Blank: Trip Collect Time: NA

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS

Aliquot ID: A10763-004 Matrix: Blank: Trip

Method: EPA 5030C/EPA 8260D

Description: TRIP BLANK

						Prepar	ation		alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	lnit.
1. Acetone	U		μg/L	50	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNO
2. Acrylonitrile	U		μg/L	2.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNO
3. Benzene	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNO
4. Bromobenzene	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNO
5. Bromochloromethane	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNO
6. Bromodichloromethane	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNO
7. Bromoform (SIM)	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNO
8. Bromomethane	U		μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNO
9. 2-Butanone	U		μg/L	25	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNO
10. n-Butylbenzene	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNO
11. sec-Butylbenzene	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
12. tert-Butylbenzene	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
13. Carbon Disulfide	U		μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
15. Chlorobenzene	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
16. Chloroethane	U		μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
17. Chloroform	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
18. Chloromethane	U		μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
19. 2-Chlorotoluene	U		μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
21. Dibromochloromethane	U		μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
22. Dibromomethane	U		μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
27. 1,1-Dichloroethane	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
28. 1,2-Dichloroethane	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
29. 1,1-Dichloroethene	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
32. 1,2-Dichloropropane	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
35. Ethylbenzene	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
36. Ethylene Dibromide	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
37.2-Hexanone	U		μg/L	50	1.0	09/09/22	VM22I09A	09/09/22 12:16		

1914 Holloway Drive 11766 E Grand River 8660 S Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order: A10763 Date: 09/13/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: TRIP BLANK Chain of Custody: 212794

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 09/08/22

Client Project No: 30136112 Sample Matrix: Blank: Trip Collect Time: NA

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS

Aliquot ID: A10763-004 Matrix: Blank: Trip

Method: EPA 5030C/EPA 8260D

Description: TRIP BLANK

					Prepar	ation	Ana	alysis	
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	lnit.
38. Isopropylbenzene	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC
39. 4-Methyl-2-pentanone	U	μg/L	50	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC
40. Methylene Chloride	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC
‡ 41.2-Methylnaphthalene	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC
42. MTBE	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC
43. Naphthalene	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC
44. n-Propylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC
45. Styrene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC
46. 1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC
47.1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC
48. Tetrachloroethene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC
49. Toluene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC
50. 1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC
‡ 52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC
53. Trichloroethene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC
55. 1,2,3-Trichloropropane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC
‡ 56.1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC
57. 1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC
58. 1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC
59. Vinyl Chloride	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC
60. m&p-Xylene	U	μg/L	2.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC
61. o-Xylene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC
‡ 62. Xylenes	U	μg/L	3.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC



Order: A10763 Date: 09/13/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: FIELD BLANK_090822 Chain of Custody: 212794

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 09/08/22

Client Project No: 30136112 Sample Matrix: Blank: Field Collect Time: 10:40

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Aliquot ID: A10763-005 Matrix: Blank: Field

Method: EPA 5030C/EPA 8260D Description: FIELD BLANK_090822

					Prepar	ation	Analysis			
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.	
1. Acetone	U	μg/L	50	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SNC	
‡ 2. Acrylonitrile	U	μg/L	2.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SNC	
3. Benzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SNC	
4. Bromobenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SNC	
5. Bromochloromethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SNC	
6. Bromodichloromethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SNC	
7. Bromoform (SIM)	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	KYE	
8. Bromomethane	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SNC	
9. 2-Butanone	U	μg/L	25	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SNC	
10. n-Butylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SNC	
11. sec-Butylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SNC	
12. tert-Butylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SNO	
13. Carbon Disulfide	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SNO	
14. Carbon Tetrachloride	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SNO	
15. Chlorobenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SNO	
16. Chloroethane	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SNO	
17. Chloroform	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SNO	
18. Chloromethane	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SNO	
19. 2-Chlorotoluene	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SNO	
20.1,2-Dibromo-3-chloropropane (SIM)	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SNO	
21. Dibromochloromethane	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SNO	
22. Dibromomethane	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SNO	
23. 1,2-Dichlorobenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SNO	
24. 1,3-Dichlorobenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SNO	
25. 1,4-Dichlorobenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SNO	
26. Dichlorodifluoromethane	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SNO	
27. 1,1-Dichloroethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SNO	
28. 1,2-Dichloroethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SNO	
29. 1,1-Dichloroethene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SNO	
30. cis-1,2-Dichloroethene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SNO	
31. trans-1,2-Dichloroethene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SNO	
32.1,2-Dichloropropane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SNO	
33. cis-1,3-Dichloropropene	U	μg/L	0.50	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SNO	
34. trans-1,3-Dichloropropene	U	μg/L	0.50	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SNO	
35. Ethylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SNO	
36. Ethylene Dibromide	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SNO	
37. 2-Hexanone	U	μg/L	50	1.0	09/09/22	\	09/09/22 12:44	\	CNIC	

1914 Holloway Drive 11766 E Grand River 8660 S Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368 F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584

Page:



Order: A10763 Date: 09/13/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: FIELD BLANK_090822 Chain of Custody: 212794

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 09/08/22

Client Project No: 30136112 Sample Matrix: Blank: Field Collect Time: 10:40

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Aliquot ID: A10763-005 Matrix: Blank: Field

Method: EPA 5030C/EPA 8260D Description: FIELD BLANK_090822

Wethod. Li A 30300/Li A 0200D	Description. TIELD BLANK_000022												
					Prepar	ation	An	alysis					
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init				
38. Isopropylbenzene	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN				
39. 4-Methyl-2-pentanone	U	μg/L	50	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN				
40. Methylene Chloride	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN				
41.2-Methylnaphthalene	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN				
42. MTBE	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN				
43. Naphthalene	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN				
44. n-Propylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN				
45. Styrene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN				
46. 1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN				
47. 1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN				
48. Tetrachloroethene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN				
49. Toluene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN				
50. 1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN				
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN				
52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN				
53. Trichloroethene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN				
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN				
55. 1,2,3-Trichloropropane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN				
56. 1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN				
57. 1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN				
58. 1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN				
59. Vinyl Chloride	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN				
60. m&p-Xylene	U	μg/L	2.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN				
61. o-Xylene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN				
‡ 62. Xylenes	U	μg/L	3.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN				



Analytical Laboratory Report Laboratory Project Number: A10763

Order: A10763 Date: 09/13/22

Definitions/ Qualifiers:

- A: Spike recovery or precision unusable due to dilution.
- **B:** The analyte was detected in the associated method blank.
- E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
- J: The concentration is an estimated value.
- M: Modified Method
- **U:** The analyte was not detected at or above the reporting limit.
- X: Matrix Interference has resulted in a raised reporting limit or distorted result.
- W: Results reported on a wet-weight basis.
- *: Value reported is outside QC limits

Exception Summary:

Analysis Locations:

All analyses performed in Holt.



Accreditation Number(s):

T104704518-22-14 (TX)



Order ID: A10763
Page: 1 of 5
Date: 09/13/22

VM22I09A: Method Blank (MB)

Run Time: VM22I09A.MB 09/09/2022 11:19 [VM22	109A]					
	MB Result	MB	MB RDL			
		Qualifier				
Analyte	μg/L		μg/L			
Acetone	U		50			
Acrylonitrile	U		2.0			
Benzene	U		1.0			
Bromobenzene	U		1.0			
Bromochloromethane	U		1.0			
Bromodichloromethane	U		1.0			
Bromomethane	U		5.0			
2-Butanone	U		25			
n-Butylbenzene	U		1.0			
sec-Butylbenzene	U		1.0			
tert-Butylbenzene	U		1.0			
Carbon Disulfide	U		5.0			
Carbon Tetrachloride	U		1.0			
Chlorobenzene	U		1.0			
Chloroethane	U		5.0			
Chloroform	U		1.0			
Chloromethane	U		5.0			
2-Chlorotoluene	U		5.0			
1,2-Dibromo-3-chloropropane (SIM)	U		1.0			
Dibromochloromethane	U		5.0			
Dibromomethane	U		5.0			
1,2-Dichlorobenzene	U		1.0			
1,3-Dichlorobenzene	U		1.0			
1,4-Dichlorobenzene	U		1.0			
Dichlorodifluoromethane	U		5.0			
1,1-Dichloroethane	U		1.0			
1,2-Dichloroethane	U		1.0			
1,1-Dichloroethene	U		1.0			
cis-1,2-Dichloroethene	U		1.0			
trans-1,2-Dichloroethene	U		1.0			
1,2-Dichloropropane	U		1.0			
cis-1,3-Dichloropropene	U		0.50			
trans-1,3-Dichloropropene	U		0.50			
	1014 Holloway Driv	_	LH+ MI 18812	T: (517) 600 02/5	E (517) 600 0299	

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Order ID: A10763
Page: 2 of 5
Date: 09/13/22

VM22I09A: Method Blank (MB)

EPA 8260D

Run Time: VM22I09A.MB 09/09/2022 11:1	9 [VM22I09A]		
	MB Result	MB I	MB RDL
		Qualifier	
Analyte	μg/L	1	μg/L
Ethylbenzene	U		1.0
Ethylene Dibromide	U		1.0
2-Hexanone	U		50
Isopropylbenzene	U	ŧ	5.0
4-Methyl-2-pentanone	U		50
Methylene Chloride	U		5.0
2-Methylnaphthalene	U		5.0
МТВЕ	U		5.0
Naphthalene	U	Į.	5.0
n-Propylbenzene	U		1.0
Styrene	U		1.0
,1,1,2-Tetrachloroethane	U		1.0
,1,2,2-Tetrachloroethane	U		1.0
etrachloroethene	U		1.0
oluene	U		1.0
,2,4-Trichlorobenzene	U	;	5.0
,1,1-Trichloroethane	U		1.0
,1,2-Trichloroethane	U		1.0
Frichloroethene Trichloroethene	U		1.0
Trichlorofluoromethane	U		1.0
,2,3-Trichloropropane	U		1.0
,2,3-Trimethylbenzene	U		1.0
,2,4-Trimethylbenzene	U		1.0
,3,5-Trimethylbenzene	U		1.0
/inyl Chloride	U		1.0
n&p-Xylene	U	:	2.0
-Xylene	U		1.0
4-Bromofluorobenzene(S)	100		80-120
Dibromofluoromethane(S)	106		80-120
1,2-Dichloroethane-d4(S)	101		80-120
Toluene-d8(S)	102		80-120

1914 Holloway Drive 11766 E Grand River 8660 S Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order ID: A10763 Page: 3 of 5 Date: 09/13/22

VM22I09A: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VM22I09A.LCS: 09/09/2022 09:54			·=	=								
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Am				Qualifier	•	ount Result	Rec.	Qualifier			Qualifier
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
Acetone	50.0	24.9	50	40-130		50.0	26.4	53		6	20	
Acrylonitrile	50.0	50.4	101	70-130		50.0	52.8	106		5	20	
Benzene	50.0	49.4	99	80-120		50.0	47.9	96		3	20	
Bromobenzene	50.0	45.4	91	75-125		50.0	44.7	89		2	20	
Bromochloromethane	50.0	51.8	104	70-130		50.0	52.4	105		1	20	
Bromodichloromethane	50.0	50.8	102	75-120		50.0	50.5	101		1	20	
Bromomethane	50.0	51.0	102	68-135		50.0	49.4	99		3	20	
2-Butanone	50.0	35.1	70	40-129		50.0	37.3	75		7	20	
n-Butylbenzene	50.0	49.9	100	70-133		50.0	47.6	95		5	20	
sec-Butylbenzene	50.0	48.6	97	70-125		50.0	46.6	93		4	20	
ert-Butylbenzene	50.0	47.9	96	70-130		50.0	46.1	92		4	20	
Carbon Disulfide	50.0	56.7	113	70-130		50.0	55.1	110		3	20	
Carbon Tetrachloride	50.0	50.0	100	70-130		50.0	48.8	98		2	20	
Chlorobenzene	50.0	50.0	100	80-120		50.0	48.7	97		3	20	
Chloroethane	50.0	51.1	102	61-130		50.0	49.6	99		3	20	
Chloroform	50.0	50.5	101	80-120		50.0	50.1	100		1	20	
Chloromethane	50.0	54.8	110	67-125		50.0	54.1	108		2	20	
2-Chlorotoluene	50.0	47.6	95	75-125		50.0	46.1	92		3	20	
1,2-Dibromo-3-chloropropane (SIM)	50.0	43.4	87	70-130		50.0	44.9	90		3	20	
Dibromochloromethane	50.0	50.1	100	70-130		50.0	50.2	100		0	20	
Dibromomethane	50.0	47.7	95	75-125		50.0	47.9	96		1	20	
1,2-Dichlorobenzene	50.0	48.8	98	70-120		50.0	48.5	97		1	20	
1,3-Dichlorobenzene	50.0	49.2	98	75-125		50.0	48.0	96		2	20	
,4-Dichlorobenzene	50.0	48.7	97	75-125		50.0	47.7	95		2	20	
Dichlorodifluoromethane	50.0	58.4	117	70-136		50.0	56.9	114		3	20	
I,1-Dichloroethane	50.0	51.6	103	70-130		50.0	51.2	102		1	20	
1,2-Dichloroethane	50.0	47.4	95	70-130		50.0	47.7	95		0	20	
,1-Dichloroethene	50.0	47.3	95	78-120		50.0	50.2	100		5	20	
sis-1,2-Dichloroethene	50.0	51.9	104	70-125		50.0	51.4	103		1	20	
rans-1,2-Dichloroethene	50.0	52.2	104	70-130		50.0	51.1	102		2	20	
,2-Dichloropropane	50.0	51.7	103	80-121		50.0	50.6	101		2	20	
cis-1,3-Dichloropropene	50.0	51.9	104	70-130		50.0	51.6	103		1	20	
trans-1,3-Dichloropropene	50.0	53.3	107	70-132		50.0	53.2	106		1	20	

1914 Holloway Drive 11766 E Grand River 8660 S Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order ID: A10763
Page: 4 of 5
Date: 09/13/22

VM22I09A: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VM22I09A.LCS: 09/09/2022 09:	54 [VM22I09A] VM22I0	9A.LCSD: 09/09/2	022 10:22 [VM2	22I09A]								
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Amo	ount			Qualifier	Spike Amoun	t Result	Rec.	Qualifier			Qualifier
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
Ethylbenzene	50.0	49.1	98	80-120		50.0	47.8	96		2	20	
Ethylene Dibromide	50.0	44.6	89	80-120		50.0	45.2	90		1	20	
2-Hexanone	50.0	36.5	73	70-130		50.0	38.5	77		5	20	
Isopropylbenzene	50.0	49.1	98	75-125		50.0	47.9	96		2	20	
4-Methyl-2-pentanone	50.0	52.0	104	70-130		50.0	54.4	109		5	20	
Methylene Chloride	50.0	51.3	103	70-130		50.0	51.5	103		0	20	
2-Methylnaphthalene	50.0	43.7	87	70-130		50.0	43.3	87		0	20	
MTBE	50.0	55.6	111	70-125		50.0	57.4	115		4	20	
Naphthalene	50.0	46.1	92	70-130		50.0	46.8	94		2	20	
n-Propylbenzene	50.0	49.4	99	70-130		50.0	47.7	95		4	20	
Styrene	50.0	48.5	97	70-130		50.0	47.2	94		3	20	
1,1,1,2-Tetrachloroethane	50.0	50.7	101	80-130		50.0	49.5	99		2	20	
1,1,2,2-Tetrachloroethane	50.0	53.1	106	70-130		50.0	53.8	108		2	20	
Tetrachloroethene	50.0	50.3	101	70-130		50.0	48.2	96		5	20	
Toluene	50.0	50.2	100	80-120		50.0	48.7	97		3	20	
1,2,4-Trichlorobenzene	50.0	48.5	97	70-130		50.0	48.0	96		1	20	
1,1,1-Trichloroethane	50.0	52.1	104	70-130		50.0	51.1	102		2	20	
1,1,2-Trichloroethane	50.0	48.7	97	75-125		50.0	48.9	98		1	20	
Trichloroethene	50.0	45.9	92	71-125		50.0	44.3	89		3	20	
Trichlorofluoromethane	50.0	54.7	109	70-133		50.0	53.6	107		2	20	
1,2,3-Trichloropropane	50.0	46.0	92	75-125		50.0	47.7	95		3	20	
1,2,3-Trimethylbenzene	50.0	48.3	97	70-130		50.0	46.5	93		4	20	
1,2,4-Trimethylbenzene	50.0	51.2	102	75-130		50.0	49.5	99		3	20	
1,3,5-Trimethylbenzene	50.0	48.7	97	75-130		50.0	47.4	95		2	20	
Vinyl Chloride	50.0	51.7	103	74-125		50.0	50.5	101		2	20	
m&p-Xylene	100	99.2	99	75-130		100	95.8	96		3	20	
o-Xylene	50.0	47.6	95	80-120		50.0	46.6	93		2	20	
4-Bromofluorobenzene(S)			99	80-120				101				
Dibromofluoromethane(S)			103	80-120				107				
1,2-Dichloroethane-d4(S)			98	80-120				101				
Toluene-d8(S)			100	80-120				101				

1914 Holloway Drive 11766 E Grand Rver 8660 S Madxinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368

lab@fibertec.us



Order ID: A10763
Page: 5 of 5
Date: 09/13/22

Definitions/ Qualifiers:

- U: The analyte was not detected at or above the Reporting Limit (RL).
- *: Value reported is outside QC limits

Exception Summary:

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

Report Generated By:

By Bailey Welch at 5:08 PM, Sep 13, 2022

Fibertec environmental services

Analytical Laboratory

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Geoprobe

11766 E. Grand River Rd.

Brighton, MI 48116

Phone: 810 220 3300 Fax: 810 220 3311

Chain of Custody # 212794 PAGE __ of __

Client Name	· Loro	radi	5						ARAME	TERS			Matrix Code Deliverables
Contact Pe	son: St	aceu	Hannola										s Soil Gw Ground Water Level 2
Dunia ak Nissa	/	- 1				Ш							A Air Sw Surface Water Level 3
30	13611	2 -	TRW Milford	(CODE)		N						PE	O Oil ww Waste Water Level 4
Email distrib	ution list: 😽	tacey	hannula@arcadis.com ncinnis@arcadis.com	MATRIX (see right corner for	,,	500						HOLD SAMPLE	P Wipe X Other: Specify EDD
		ohn in	ncinnis@arcadis.com	H COR	NER.	0						OLD	
Quote#				SEE RIG	# OF CONTAINERS	80						-	
Purchase O	rder# 2	10136	112	TRIX	Ä	SB							
Date	Time	Sample #	Client Sample Descriptor	_	_	\vdash				_			Remarks:
9-8-22	0920		OW-16D2-090822	GW	_	X							rush TAT
9.8.22	1007		OW-16D2R1-090822	GW	3	X							rush TAT
9.8.22	1055		OW-16D2R2-090822	CM	3	X							rush TAT Received
			TRIPBLANK		3	X							Std TAT OK On Ice
9.8.22	1040		FIELDBLANK-090822		3	×							SAD TAT OK
						П							
													Received By Lab
													2.0
													SEL 0.9 SOSS
													Initials: 55
Comments													
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Sampled/R	elinquished B	Escard	Hannula Syfful	Pate	/ Tim	e 2	າ	1:00p1	Receiv	ed By:	1/10	27	And the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of t
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1 b	us. day	<u></u>	bus. days3 bus. days		4 k	ous. d	days	6	1		Fiberte	c pro	oject number: A 10763
5-71	ous. days (sta	ındard)	Other (specify time/date requirement):			_					Tempe	eratur	re upon receipt at Lab: 4.4°C
			Please		e bo	ack	for	terms an	d con	dition	S.		



Tuesday, October 4, 2022

Fibertec Project Number: A11227 Amended

Project Identification: TRW Milford (30136112) /30136112

Submittal Date: 10/03/2022

Ms. Stacey Hannula Arcadis U.S., Inc. - Novi 28550 Cabot Drive Suite 500 Novi, MI 48377

Dear Ms. Hannula,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

Analytical report amended due to a data upload error for sample A11227-001 (OW-16D2_100322). This report replaces the original report created 10/4/22 @ 3: 52 PM.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

By Katherine Jones at 5:01 PM, Oct 04, 2022

For Daryl P. Strandbergh Laboratory Director

Enclosures



Order: Date:

09:32

Matrix: Ground Water

A11227 10/04/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2_100322 Chain of Custody: 205827

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 10/03/22

Aliquot ID:

A11227-001

Client Project No: 30136112 Sample Matrix: Ground Water Collect Time:

Sample Comments:

Volatile Organic Compounds (VOCs) by GC/MS

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

volatile Organic Compounds (VOCs) by GC/MS				Aliquot ID: A11227-001 Matrix: Ground				Jiounu water		
Method: EPA 5030C/EPA 8260D				Des	cription:	OW-16D2_100322				
						Prepara			alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U		μg/L	50	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
3. Benzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
4. Bromobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
5. Bromochloromethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
6. Bromodichloromethane	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
‡ 7. Bromoform (SIM)	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
8. Bromomethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
9.2-Butanone	U		μg/L	25	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
10. n-Butylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
11. sec-Butylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
12. tert-Butylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
13. Carbon Disulfide	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
14. Carbon Tetrachloride	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
15. Chlorobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
16. Chloroethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	KYD
17. Chloroform	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
18. Chloromethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
19.2-Chlorotoluene	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
21. Dibromochloromethane	U	V+	μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
22. Dibromomethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
27. 1,1-Dichloroethane	3.2		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
28. 1,2-Dichloroethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
29. 1,1-Dichloroethene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
30. cis-1,2-Dichloroethene	17		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
31. trans-1,2-Dichloroethene	1.4		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
32. 1,2-Dichloropropane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
35. Ethylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
36. Ethylene Dibromide	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
37.2-Hexanone	U		μg/L	50	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART

lab@fibertec.us

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368

F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584

Page:



Order: A11227 Date:

10/04/22

205827

OW-16D2_100322 Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Chain of Custody:

TRW Milford (30136112) 10/03/22 Client Project Name: Sample No: Collect Date:

30136112 Client Project No: Sample Matrix: **Ground Water** Collect Time: 09:32

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by O Method: EPA 5030C/EPA 8260D	GC/MS			•	uot ID: cription:	A11227-001 OW-16D2_100322	Matrix:	Ground Water		
						Prepara	tion	An	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
38. Isopropylbenzene	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
39. 4-Methyl-2-pentanone	U		μg/L	50	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
40. Methylene Chloride	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
‡ 41.2-Methylnaphthalene	U	V+ L+	μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
42. MTBE	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
43. Naphthalene	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
44. n-Propylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
45. Styrene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
46. 1,1,1,2-Tetrachloroethane	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
47.1,1,2,2-Tetrachloroethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
48. Tetrachloroethene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
49. Toluene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
50. 1,2,4-Trichlorobenzene	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
51.1,1,1-Trichloroethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
‡ 52.1,1,2-Trichloroethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
53. Trichloroethene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
54. Trichlorofluoromethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
55. 1,2,3-Trichloropropane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
‡ 56. 1,2,3-Trimethylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
57. 1,2,4-Trimethylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
58. 1,3,5-Trimethylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
59. Vinyl Chloride	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
60. m&p-Xylene	U		μg/L	2.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
61. o-Xylene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
‡ 62. Xylenes	U		μg/L	3.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART

3 of 12



Order: /

A11227 10/04/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2R1_100322 Chain of Custody: 205827

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 10/03/22

Client Project No: 30136112 Sample Matrix: Ground Water Collect Time: 10:18

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS			Aliquot ID:							
Method: EPA 5030C/EPA 8260D				Des	cription:	OW-16D2R1_100	322			
						Prepa	ration	Ana	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U		μg/L	50	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
3. Benzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
4. Bromobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
5. Bromochloromethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
6. Bromodichloromethane	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
‡ 7. Bromoform (SIM)	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
8. Bromomethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
9.2-Butanone	U		μg/L	25	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
10. n-Butylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
11. sec-Butylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
12. tert-Butylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
13. Carbon Disulfide	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
14. Carbon Tetrachloride	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
15. Chlorobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
16. Chloroethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
17. Chloroform	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
18. Chloromethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
19.2-Chlorotoluene	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
21. Dibromochloromethane	U	V+	μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
22. Dibromomethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
27.1,1-Dichloroethane	2.1		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
29.1,1-Dichloroethene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
30. cis-1,2-Dichloroethene	19		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
31.trans-1,2-Dichloroethene	1.1		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
32. 1,2-Dichloropropane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
35. Ethylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
36. Ethylene Dibromide	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
37.2-Hexanone	U		μg/L	50	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART

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Order: Date: A11227 10/04/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2R1_100322 Chain of Custody: 205827

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 10/03/22

Client Project No: 30136112 Sample Matrix: Ground Water Collect Time: 10:18

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by	GC/MS			Aliq	uot ID:	A11227-002	Matrix:	Ground Water		
Method: EPA 5030C/EPA 8260D				Des	cription:	OW-16D2R1_100	322			
						Prepai	ation	An	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
38. Isopropylbenzene	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
39. 4-Methyl-2-pentanone	U		μg/L	50	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
40. Methylene Chloride	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
‡ 41.2-Methylnaphthalene	U	V+ L+	μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
42. MTBE	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
43. Naphthalene	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
44. n-Propylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
45. Styrene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
46. 1,1,1,2-Tetrachloroethane	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
47.1,1,2,2-Tetrachloroethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
48. Tetrachloroethene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
49. Toluene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
50. 1,2,4-Trichlorobenzene	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
51.1,1,1-Trichloroethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
‡ 52.1,1,2-Trichloroethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
53. Trichloroethene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
54. Trichlorofluoromethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
55. 1,2,3-Trichloropropane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
‡ 56. 1,2,3-Trimethylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
57. 1,2,4-Trimethylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
58. 1,3,5-Trimethylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
59. Vinyl Chloride	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
60. m&p-Xylene	U		μg/L	2.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
61. o-Xylene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
‡ 62. Xylenes	U		μg/L	3.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART



Order: Date:

Matrix: Ground Water

A11227 10/04/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2R2_100322 Chain of Custody: 205827

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 10/03/22

Aliquot ID:

A11227-003

Client Project No: 30136112 Sample Matrix: Ground Water Collect Time: 11:07

Sample Comments:

Volatile Organic Compounds (VOCs) by GC/MS

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Method: EPA 5030C/EPA 8260D Parameter(s)				Des	cription:	OW-16D2R2_100	322			
Parameter(s)										
Parameter(s)		_			D	Prepara			alysis	
	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U		μg/L	50	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
3. Benzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
4. Bromobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
5. Bromochloromethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
6. Bromodichloromethane	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
‡ 7. Bromoform (SIM)	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
8. Bromomethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
9.2-Butanone	U		μg/L	25	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
10. n-Butylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
11. sec-Butylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
12. tert-Butylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
13. Carbon Disulfide	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
14. Carbon Tetrachloride	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
15. Chlorobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
16. Chloroethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
17. Chloroform	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
18. Chloromethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
19. 2-Chlorotoluene	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
21. Dibromochloromethane	U	V+	μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
22. Dibromomethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
28. 1,2-Dichloroethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
29.1,1-Dichloroethene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
30. cis-1,2-Dichloroethene	10		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
35. Ethylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
36. Ethylene Dibromide	U		μg/L	1.0	1.0	10/03/22		10/03/22 19:04		
37. 2-Hexanone	U		μg/L	50	1.0	10/03/22		10/03/22 19:04		

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Order: Date:

11:07

A11227 10/04/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2R2_100322

Chain of Custody: 205827

TRW Milford (30136112) 10/03/22 Client Project Name: Collect Date: Sample No:

30136112 Client Project No: Sample Matrix: **Ground Water** Collect Time:

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Method: EPA 5030C/EPA 8260D				•	uot ID: cription:	A11227-003 OW-16D2R2_100		Ground Water		
					•	Prepar	ration	An	alvsis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution		P. Batch	A. Date	A. Batch	Init.
38. Isopropylbenzene	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
39. 4-Methyl-2-pentanone	U		μg/L	50	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
40. Methylene Chloride	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
‡ 41.2-Methylnaphthalene	U	V+ L+	μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
42. MTBE	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
43. Naphthalene	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
44. n-Propylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
45. Styrene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
46. 1,1,1,2-Tetrachloroethane	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
47.1,1,2,2-Tetrachloroethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
48. Tetrachloroethene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
49. Toluene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
50. 1,2,4-Trichlorobenzene	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
51.1,1,1-Trichloroethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
‡ 52.1,1,2-Trichloroethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
53. Trichloroethene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
54. Trichlorofluoromethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
55. 1,2,3-Trichloropropane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
‡ 56.1,2,3-Trimethylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
57. 1,2,4-Trimethylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
58. 1,3,5-Trimethylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
59. Vinyl Chloride	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
60. m&p-Xylene	U		μg/L	2.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
61. o-Xylene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
‡ 62. Xylenes	U		μg/L	3.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART

Page:



Order: Date:

A11227 10/04/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Fieldblank_100322 Chain of Custody: 205827

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 10/03/22

Client Project No: 30136112 Sample Matrix: Blank: Field Collect Time: 13:00

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS		Aliq	uot ID:			Blank: Field				
Method: EPA 5030C/EPA 8260D				Des	cription:	Fieldblank_10032	2			
						Prepara	ation	An	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U		μg/L	50	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
3. Benzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
4. Bromobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
5. Bromochloromethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
6. Bromodichloromethane	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
‡ 7. Bromoform (SIM)	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
8. Bromomethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
9. 2-Butanone	U		μg/L	25	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
10. n-Butylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
11. sec-Butylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
12. tert-Butylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
13. Carbon Disulfide	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
14. Carbon Tetrachloride	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
15. Chlorobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	AR1
16. Chloroethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
17. Chloroform	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
18. Chloromethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
19. 2-Chlorotoluene	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
21. Dibromochloromethane	U	V+	μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
22. Dibromomethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
28. 1,2-Dichloroethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
29. 1,1-Dichloroethene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	AR1
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	AR1
35. Ethylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	AR1
36. Ethylene Dibromide	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
37.2-Hexanone	U		μg/L	50	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART

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Order: Date: A11227 10/04/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Fieldblank_100322 Chain of Custody: 205827

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 10/03/22

Client Project No: 30136112 Sample Matrix: Blank: Field Collect Time: 13:00

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC Method: EPA 5030C/EPA 8260D	/MS			•		A11227-004 Fieldblank_10032		Blank: Field		
						Prepar	ation	Ana	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution		P. Batch	A. Date	A. Batch	Init.
38. Isopropylbenzene	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
39. 4-Methyl-2-pentanone	U		μg/L	50	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
40. Methylene Chloride	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
‡ 41.2-Methylnaphthalene	U	V+ L+	μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
42. MTBE	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
43. Naphthalene	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
44. n-Propylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
45. Styrene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
46. 1,1,1,2-Tetrachloroethane	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
47.1,1,2,2-Tetrachloroethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
48. Tetrachloroethene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
49. Toluene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
50. 1,2,4-Trichlorobenzene	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
51.1,1,1-Trichloroethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
‡ 52.1,1,2-Trichloroethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
53. Trichloroethene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
54. Trichlorofluoromethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
55. 1,2,3-Trichloropropane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
‡ 56. 1,2,3-Trimethylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
57. 1,2,4-Trimethylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
58. 1,3,5-Trimethylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
59. Vinyl Chloride	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
60. m&p-Xylene	U		μg/L	2.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
61. o-Xylene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
‡ 62. Xylenes	U		μg/L	3.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART



Order: Date:

A11227 10/04/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Trip Blank Chain of Custody: 205827

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 10/03/22

Client Project No: 30136112 Sample Matrix: Blank: Trip Collect Time: NA

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC Method: EPA 5030C/EPA 8260D	/MS			-	uot ID: cription:	A11227-005 Trip Blank	Matrix: I	Blank: Trip		
						Prepa	ration	An	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U		μg/L	50	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR1
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR1
3. Benzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
4. Bromobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
5. Bromochloromethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
6. Bromodichloromethane	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
‡ 7. Bromoform (SIM)	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
8. Bromomethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
9.2-Butanone	U		μg/L	25	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
10. n-Butylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
11. sec-Butylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
12. tert-Butylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
13. Carbon Disulfide	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
14. Carbon Tetrachloride	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
15. Chlorobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
16. Chloroethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
17. Chloroform	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
18. Chloromethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
19.2-Chlorotoluene	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
21. Dibromochloromethane	U	V+	μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
22. Dibromomethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
27. 1,1-Dichloroethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
28. 1,2-Dichloroethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
29. 1,1-Dichloroethene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
35. Ethylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
36. Ethylene Dibromide	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
37.2-Hexanone	U		μg/L	50	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR ²

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Blank: Trip

Order: Date: A11227 10/04/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Trip Blank Cl

Chain of Custody: 205827

10/03/22

Client Project Name: TRW Milford (30136112) Sample No:

30136112

Collect Date:

Collect Time: NA

Client Project No:
Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Sample Matrix:

Volatile Organic Compounds (VOCs) by	GC/MS		Alic	quot ID:	A11227-005	Matrix:	Blank: Trip		
Method: EPA 5030C/EPA 8260D			Des	scription:	Trip Blank				
					Prepa	ration	An	alysis	
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
38. Isopropylbenzene	U	μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
39. 4-Methyl-2-pentanone	U	μg/L	50	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
40. Methylene Chloride	U	μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
‡ 41.2-Methylnaphthalene	U	V+ μg/L L+	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
42. MTBE	U	μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
43. Naphthalene	U	μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
44. n-Propylbenzene	U	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
45. Styrene	U	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
46. 1,1,1,2-Tetrachloroethane	U	V+ μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
47. 1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
48. Tetrachloroethene	U	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
49. Toluene	U	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
50. 1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
‡ 52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
53. Trichloroethene	U	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
55. 1,2,3-Trichloropropane	U	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
‡ 56.1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
57. 1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
58. 1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
59. Vinyl Chloride	U	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
60. m&p-Xylene	U	μg/L	2.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
61. o-Xylene	U	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
‡ 62. Xylenes	U	μg/L	3.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART



Analytical Laboratory Report Laboratory Project Number: A11227

Order: A11227 Date: 10/04/22

Definitions/ Qualifiers:

- **A:** Spike recovery or precision unusable due to dilution.
- **B:** The analyte was detected in the associated method blank.
- E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
- J: The concentration is an estimated value.
- M: Modified Method
- **U:** The analyte was not detected at or above the reporting limit.
- X: Matrix Interference has resulted in a raised reporting limit or distorted result.
- W: Results reported on a wet-weight basis.
- *: Value reported is outside QC limits

Exception Summary:

L+ : Recovery in the associated laboratory sample (LCS) exceeds the upper control limit. Results may be biased high.
 V+ : Recovery in the associated continuing calibration verification sample (CCV) exceeds the upper control limit. Results may be biased high.

Analysis Locations:

All analyses performed in Holt.



Accreditation Number(s):

T104704518-22-14 (TX)

Fibertec environmental services

Analytical Laboratory

1914 Holloway Drive Holt, MI 48842

Phone: 517 699 0345 Fax: 517 699 0388 8660 S. Mackinaw Trail Cadillac, MI 49601 Phone: 231 775 8368

Fax: 231 775 8584

Geoprobe

Fax: 810 220 3311

11766 E. Grand River Rd. Brlghton, MI 48116 Phone: 810 220 3300 Chain of Custody # 205827
PAGE ___ of ___

Fax: 517 699 0388 email: lab@fibertec.us

Client Name: Avcadis **PARAMETERS** Matrix Code Deliverables Contact Person: Stacey Hannula X Level 2 S Soil GW Ground Water Project Name/ Number: Surface Water Level 3 TRW Milford 30136112 OOil Waste Water Level 4 100 Email distribution list: Stacey. hannula@arcadis.com
john.mcinnis@arcadis.com 8260 P Wipe Other: Specify EDD MATRIX (SEE RIGHT CORNER # OF CONTAINERS Quote# 30136112 Purchase Order# Sample # Client Sample Descriptor Remarks: 0932 10/3/22 OW-16D2_100322 3 48 m TAT GW × OW-16D2R1-100322 1013122 1018 GW 3 48 hr TAT 3 OW-16D2R2-100322 10/3/22 1107 (N X 48hr TAT 10/3/27 1100 FIELDBLANK_100322 X STATAT TRIPBLANK 3 STEL TAT Received By Lah Comments: Date/Time 1204 14.49 Turnaround Time ALL RESULTS WILL BE SENT BY THE END OF THE BUSINESS DAY LAB USE ONLY Received 2 bus, days 1 bus, day 3 bus, days ____4 bus. days Fibertec project number: On Ice Temperature upon receipt at Lab: __5-7 bus, days (standard) Other (specify time/date requirement):_ Please see back for terms and conditions

Attachment 12

Well Profile Analysis Report - Chemical and Biological (OW-16D2)



Date: July 28, 2022

Lab Report No. 22457

John McInnis Arcadis 28550 Cabot Drive, Suite 500 Novi, Michigan 48377

Project Description: ZF North America Inc. Well OW-16D2; Samples dated: 06/06/2022

Complete Well Profile (1), PO# KH Milford, John McInnis

PN:30036112.H2

Test Description:

The Complete Well Profile analysis is designed for comparative analysis of two samples, typically one static and one pumping sample. The Complete Well Profile utilizes a series of inorganic chemical and microbiological tests to identify fouling and corrosion issues with potential impacts on the operation of the sampled well. The tests include a number of inorganic chemical parameters such as pH, total dissolved solids/conductivity, hardness, alkalinity, oxidation reduction potential (ORP), bicarbonate, carbonates, silica, sodium, potassium, chloride, iron, manganese, phosphate, nitrate, sulfate, and total organic carbon (TOC). Biological assessment is designed to quantify the total bacterial population, identify two dominant populations of bacteria, assess anaerobic conditions, and identify the presence of iron related bacteria and sulfate reducing organisms. Also included are tests for Adenosine triphosphate (ATP), heterotrophic plate count (HPC), and a microscopic evaluation; and in potable systems, total coliform and E. coli coliform presence/absence.

Testing Procedures:

All laboratory testing procedures are performed according to the guidelines set forth in *Standard Methods* for the Examination of Water and Wastewater as established by the American Public Health Association (APHA), American Water Works Association (AWWA), and Water Environment Federation (WEF). Corrosion analyses are performed in accordance with the guidelines as set forth by the National Association of Corrosion Engineers (NACE). In general, these methods are approved by both the Environmental Protection Agency (EPA) and AWWA for the reporting of water and/or wastewater data.

Sample collection and shipment is the responsibility of the customer, performed according to protocol and procedures defined by the laboratory in advance of the sampling event with regards to the specific project and nature of the problem.

Disclaimer:

The data and interpretations presented are based on an evaluation of the samples and submitted data. Conclusions reached in this report are based upon the data available at the time of submittal and the accuracy of the report depends upon the validity of information submitted. Any recommendations presented are based on laboratory and field evaluations of similar fouling occurrences within potable water systems. Further investigative efforts, such as efficiency testing, site inspection, video survey, or other evaluation methods may offer additional insight into the system's condition and the degree of fouling present.

Client: Arcadis Date: July 28, 2022 Lab Report No. 22457

Re: ZF North America Inc. Well OW-16D2; Samples dated: 06/06/2022 Complete Well Profile (1), PO# KH Milford, John McInnis PN: 30036112.H2

ND - Not Detected NA - Not Applicable	Well OW-16D2 Casing	Well OW-16D2 Aquifer	Detection Limits
* as CaCO ₃	7.47	7.50)
pH Value	7.47	7.59	NA
Phenolphthalein Alkalinity*	ND	ND	4 mg/l
Total Alkalinity*	292	300	4 mg/l
Hydroxide Alkalinity	ND	ND	4 mg/l
Carbonate Alkalinity	ND	ND	4 mg/l
Bicarbonate Alkalinity	292	300	4 mg/l
Total Dissolved Solids	739	721	1.0 mg/l
Conductivity (µm or µS/cm)	1,027	1,002	NA
ORP (mV)	179.1	160.0	NA
Langelier Saturation Index (at 16°C)	+ 0.30	+ 0.40	NA
Total Hardness*	400	384	4 mg/l
Carbonate Hardness	292	300	4 mg/l
Non-Carbonate Hardness	108	84	4 mg/l
Calcium*	328	304	4 mg/l
Magnesium*	72	80	4 mg/l
Sodium (as Na)	72.20	72.40	0.02 mg/l
Potassium (as K)	2.3	2.7	0.1 mg/l
Phosphorus, Reactive (as PO ₄ ³⁻)	0.06	0.06	0.06 mg/l
Chlorides (as CI)	186.0	196.0	2 mg/l
Nitrate (Nitrogen)	ND	ND	0.3 mg/l
Chlorine (as Cl)	ND	ND	0.02 mg/l
Dissolved Iron (as Fe ²⁺)	ND	ND	0.02 mg/l
Suspended Iron (as Fe ³⁺)	0.03	0.03	0.02 mg/l
Iron Total (as Fe)	0.03	0.03	0.02 mg/l
Iron (resuspended)	1.23	1.08	0.02 mg/l
Copper (as Cu)	ND	ND	0.04 mg/l
Manganese (as Mn)	1.30	0.30	0.1 mg/l
Sulfate (as SO ₄)	44	36	2 mg/l
Silica (as SiO ₂)	13.9	12.6	1.0 mg/l
Tannin/Lignin	0.1	0.2	0.1 mg/l
Total Organic Carbon (C)	ND	ND	0.3 mg/l

Biological Analysis:

	Well OW-16D2 Casing	Well OW-16D2 Aquifer	Detection Limit
Plate Count (colonies/ml)	82	438	NA
Anaerobic Growth (%)	<10	50	NA
Sulfate Reducing Bacteria	Negative	Positive	NA
SRB Occurrence	-	Excessive	NA
Fe/Mn Oxidizing Bacteria	Positive	Positive	NA
ATP (cells per ml) Initial	229,000	351,000	NA
ATP (cells per ml) 24 Hour	212,000	277,000	NA
Bacterial Identification	Pseudomonas stutzeri	Bacillus specie	NA
Bacterial Identification	Comamonas testosteroni	Leptothrix	NA
Bacterial Identification	Leptothrix	-	

Microscopic Evaluation:

Casing: Low visible bacterial activity, low crystalline debris, low plant particulate matter,

moderate iron oxide, low iron oxide entrained biomass with very low numbers of

Leptothrix

Aquifer: Low visible bacterial activity, low crystalline debris, very low plant particulate

matter, moderate iron oxide, low iron oxide entrained biomass with very low

numbers of *Leptothrix*

Observations and Interpretations:

When received in the lab, both samples were clear with a trace of brown sediment. Chemical analysis performed as part of the complete well profile analysis found only minor variations present in the chemical concentrations between the casing and aquifer samples.

The chemical analysis reported high alkalinity with high hardness, and total dissolved solids (TDS) along with a high associated conductivity value. Each of the samples displayed a slightly alkaline pH value. The analysis also found non-carbonate hardness to make up approximately 30% of the total hardness content. Non-carbonate hardness often occurs as calcium sulfate (the mineral gypsum) which is a harder material that is more difficult to remove from the well environment than calcium carbonate. The oxidation-reduction potential (ORP) was positive and at a level indicating moderately oxidative conditions with a tendency for the oxidation and deposition of available metals within the well system as metallic oxides.

The Langelier Saturation Index (LSI), which is a calculation of the amount of dissolved calcium carbonate in the water and used as an indication of the potential for carbonate scale development as well as corrosion, was slightly positive although very near a zero value

indicating a nearly balanced condition with calcium carbonate at the saturation point. Under these conditions there is a possibility of calcium carbonate scale deposition over time. There is also a possibility for the deposition of other mineral scale unrelated to carbonate scale. Chemicals and compounds found to be present at levels above a desirable groundwater concentration included calcium, sodium, potassium, chlorides, manganese, and resuspended iron. Resuspended iron is iron that has been concentrated by both chemical processes as well as by the metabolic activity of iron related bacteria and a high concentration of resuspended iron is an indication of the likely presence of such bacteria.

Heterotrophic plate counts for both samples were limited with 82 colony forming units noted on the sample representing the casing sample and 438 for the aquifer sample. It should be pointed out that this may not be a true representation of the actual bacterial population since over 95% of all microorganisms do not grow on culture media under laboratory conditions. Adenosine triphosphate (ATP), a measure of the total amount of living material in the sample, had cell counts at levels of concern in both samples at 229,000 cells per milliliter (cpm) in the casing sample and 351,000 cpm in the aquifer sample. This is well above the normal cell density of 20,000 to 60,000 cpm in a typical sample not experiencing biofouling.

The dominant organisms present were species of *Pseudomonas*, *Comamonas*, and *Bacillus*. All three genus of organisms are common bacteria found throughout the environment. Each is capable of forming large masses of biofilm as a means of protection and nutrient capture which can cause well failure by plugging well screens and formation pore spaces.

Anaerobic growth represented less than 10% of the total microbial growth in the casing sample and 50% in the aquifer sample. Anaerobic conditions arise when the environment becomes depleted of oxygen leading to anoxic conditions. In a well environment this is usually a zone of low or no flow where aerobic organisms die off after consuming the available oxygen allowing anaerobic organisms to take over. In addition to taste and odor problems, anaerobic organisms are prolific producers of polysacride biofilm (slime) which can harbor other anaerobic organisms such as coliforms. The aquifer sample contained a large population of sulfate reducing bacteria and both samples contained evidence of the iron and manganese oxidizing organism *Leptothrix*. *Leptothrix* is a sheathed filamentous bacterium that can generally be found in different types of aquatic environments with sufficient organic matter. *Leptothrix* bacteria are known to be capable of oxidizing both iron and manganese. Oxidation, resulting from cascading water or rapid recharge of groundwater from surface water, can stimulate the growth and activity of these bacteria. *Leptothrix* are commonly found associated with other iron and manganese oxidizing bacteria such as *Gallionella* and *Crenothrix*.

The microscopic evaluation of both samples found a low level of visible bacterial activity. There were moderate concentrations of iron oxide as such and low iron oxide entrained biofilm. Leptothrix were noted in very low numbers in each sample

Conclusions and Recommendations:

The complete profile analysis found a significant potential for mineral scale buildup over time as indicated by the high concentration of dissolved minerals present including hardness, calcium, and alkalinity. The bacterial assessment as well as the microscopic evaluation found strong evidence indicating that the well is heavily impacted by excessive bacterial growth, particularly by slime forming organisms. This is most likely the primary cause of the limited hydraulic connection between the interior of the monitoring well and the aquifer. To help restore unrestricted flow between the two well rehabilitation involving mechanical brushing, an acid

treatment to dissolve mineral scale followed by disinfection to reduce the bacterial load in the well.

Cleaning should begin with mechanically scrubbing the interior of the well using a surge block or brush. This will help remove loose scale, mineral deposits, and biofilm which can provide a protective environment for microorganisms. Once the entire column has been scoured, bail or pump the disrupted material and any fill from the well, starting at the bottom.

Once clear, a combined chemical and mechanical treatment can continue. Chemical treatment should begin by placing a solution of 8% phosphoric acid combined with 2% dispersion polymer such as Layne's QC-21 or Johnson Screen's NW-310 biodispersant below the static water level and aggressively swabbing or surging it into the producing zones for approximately five minutes per foot of screen. The recommended biodispersants are NSF approved for use in potable wells and are recommended to enhance the activity of the acid in cleaning biomass and extending the efficiency of the acid in attacking mineral scale. The acid and biodispersant solution will aid in breaking down the biofilm that surrounds and protects the organisms, allowing for better penetration of the disinfection solution as well as removing any mineral scale present.

Once the well has been effectively purged of all acid residue and is pumping clear of visible turbidity, disinfection should be carried out utilizing a pH adjusted chlorination at a 300-ppm chlorine level with a targeted pH range of 6.5 to 7.0. The treatment volume of the disinfection solution should be equivalent to 3 times the well and gravel pack volume and evenly distributed throughout the screened zones. This larger volume will flood the borehole with the disinfection solution and increase the effectiveness of treatment. Utilization of a chlorine enhancing chemistry such as Johnson's NW-410 chlorine enhancer or Layne's Oximate for pH control is strongly advised to improve disinfection. The disinfection solution should be surged into the well for approximately two minutes for each foot of screen.

Based on information provided in the well data sheet, the following volumes are necessary for each step of the recommended treatment process:

Rehabilitation

NW-120 Phosphoric Acid (75% strength)	2 gallons
Biodispersant	0.5 gallons
Potable water for blending	10 gallons

Disinfection

Sodium Hypochlorite (12% strength)	0.12 gallons
Chlorine Enhancer	0.21 gallons
Potable Water for blending	45 gallons

For acid treatments, mix the chemicals in this order: water, acid, biodispersant. Mix lightly. If, during acid treatment, the pH rises to a level above 3.0, add additional acid and water in small increments to bring the pH back down. No additional dispersant should be needed.

For the chlorine treatment, mix the chemicals in this order: water, chlorine enhancer, check the pH (above 5), add chlorine. Mix lightly. Add the solution evenly throughout the well column and agitate. During disinfection, if the chlorine residual has diminished below 100 ppm, add

additional sodium hypochlorite in small increments to raise it to that level. Allow the solution to remain down-hole, overnight, before evacuation.

No information was available on the history of the well, but if it experiences frequent biofouling, occasional maintenance treatments may help keep it functioning properly for longer periods of time. With a well of this size (2-inch diameter) it may be possible to introduce chlorine or bromine tablets into the well and allow them to settle to the bottom. After allowing them time to settle and dissolve, surge the solution over the length of the screen and pump or bail out. This may not eliminate the need for a more extensive cleaning periodically, but it should inhibit bacterial regrowth.

If you have any questions regarding the analyses or the information presented, please contact our office.

Michael Schnieders, PG, PH-GW Hydrogeologist

Attachment 13

Photographs of OW-16D2 Well (Revised-Added a Photograph)



OW-16D2 joint where sections of the well casing are connected together



OW-16D2 Well Screen

Attachment 14

Summary of Results and Laboratory Analytical Reports – Vertical Aquifer Profile Borings

Table 1
Detected Analytes in Groundwater - Vertical Aquifer Profiling Borings
Village of Milford Central Park
Milford, Michigan



MAD Design ID			VAP-01-01 15 20	VAP-01-02 35 40	VAP-01-03 45 50	VAP-01-04 55 60	VAP-01-05_65_70	VAP-01-06_75_80	VAP-01-07_85_90	VAP-01-08_95_100	VAP-01-09_105_110	VAP-01-10_115_120	VAP-01-11_125_130
VAP Boring ID:	RDW	GSI		5/17/2002	5/17/2022	5/17/2022	5/18/2022	5/18/2022	5/18/2022	5/19/2022	5/19/2022	5/19/2022	5/20/2022
Date Completed:	Criteria	Criteria	5/16/2022			55-60	65-70	75-80	85-90	95-100	105-110	115-120	125-130
Sampling Depth (Ft bgs):	ļ		15-20	35-40	45-50				2.2	2.3	2.5	<1.0	<1.0
1,1-Dichloroethane	880	740	<1.0	<1.0	<1.0	<1.0	<1.0	1.9					13
	70 (A)	620	<1.0	<1.0	1.2	2.1	9.5	21	19	20	18	14	
cis-1,2-Dichloroethene		_		<1.0	<1.0	<1.0	<1.0	1.2	1.3	1.4	1.6	1.7	2.7
trans-1,2-Dichloroethene	100 (A)	1,500 (X)				-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrachloroethene	5.0 (A)	60 (X)	<1.0	<1.0	<1.0	<1.0					1.5	1.4	<1.0
Toluene	790 (E)	270	<1.0	15	8.5	15	<1.0	1.5	4.7	<1.0	-		
	5.0 (A)	200 (X)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	1	` ` `			<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl chloride	2.0 (A)	13 (X)	<1.0	<1.0	<1.0	<1.0	V1.0	V1.0	1110				
							0.5	24.1	22.5	23.7	22.1	15.7	15.7
	TOTAL CV	/OCs					9.5					47.4	15.7
	TOTAL VO)Cs					9.5	25.6	27.2	23.7	23.6	17.1	15.7

1/3 2022-0609-Table 1 VAP-VOM Central Park

Table 1 Detected Analytes in Groundwater - Vertical Aquifer Profiling Borings Village of Milford Central Park Milford, Michigan



			VAR 02 04 45 20	VAR-02-02 25 30	VAP-02-03 35 40	VAP-02-04 45 50	VAP-02-05 55 60	VAP-02-06_65_70	VAP-02-07_75_80	VAP-02-08_85_90	VAP-02-09_95_100	VAP-02-10_105_110	VAP-02-11_115-120
VAP Boring ID:	RDW	GSI				5/24/2022	5/24/2022	5/24/2022	5/24/2022	5/24/2022	5/25/2022	5/25/2022	5/25/2022
Date Completed:	Criteria	Criteria	5/23/2022	5/23/2022	5/23/2022			65-70	75-80	85-90	95-100	105-110	115-120
Sampling Depth (Ft bgs):			15-20	25-30	35-40	45-50	55-60				<1.0	<1.0	<1.0
1,1-Dichloroethane	880	740	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0			
	70 (A)	620	<1.0	<1.0	<1.0	1.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	<u> </u>		-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	100 (A)	1,500 (X)	<1.0	<u> </u>			<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrachloroethene	5.0 (A)	60 (X)	<1.0	<1.0	<1.0	<1.0					<1.0	<1.0	<1.0
Toluene	790 (E)	270	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0			
	5.0 (A)	200 (X)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	` ` `			<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl chloride	2.0 (A)	13 (X)	<1.0	<1.0	<1.0	V1.0	1110						

TOTAL CVOCs	1.5	
TOTAL VOCs	1.5	

2/3 2022-0609-Table 1 VAP-VOM Central Park



VAP Boring ID:	RDW	GSI	VAP-03-01_15_20	VAP-03-02_25_30	VAP-03-03_35_40	VAP-03-04_45_50	VAP-03-05_55_60	VAP-03-06_65_70	VAP-03-07_75_80	VAP-03-08_85_90	VAP-03-09_95_100	VAP-03-10_105_110
Date Completed:	Criteria	Criteria	5/23/2022	5/23/2022	5/24/2022	5/24/2022	5/24/2022	5/24/2022	5/24/2022	5/25/2022	5/25/2022	5/25/2022
Sampling Depth (Ft bgs):	Orneria	Ontona	15-20	25-30	35-40	45-50	55-60	65-70	75-80	85-90	95-100	105-110
1,1-Dichloroethane	880	740	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	70 (A)	620	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	100 (A)	1,500 (X)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrachloroethene	5.0 (A)	60 (X)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Toluene	790 (E)	270	1.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.0
Trichloroethene	5.0 (A)	200 (X)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl chloride	2.0 (A)	13 (X)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

TOTAL CVOCs			
TOTAL VOCs	1.5	1.0	

Notes:

All concentrations are in micrograms per liter (µg/L).

(A) Criterion is the State of Michigan Drinking Water Standard established pursuant to Section 5 of the Safe Drinking Water Act No. 399 of the Public Acts of 1976.

(X) The Groundwater Surface Water Interface (GSI) criterion shown is not protective for surface water that is used as a drinking water source.

(E) Criterion is the aesthetic drinking water value, as required by Section 20120a(5) of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA).

Acronyms and Abbreviations:

EGLE Michigan Department of Environment, Great Lakes and Energy

ft bgs feet below ground surface

GSI Groundwater/Surface Water Interface
ID Insufficient data to develop criterion
RDW Residential Drinking Water
VAP vertical aquifer profile

2022-0609-Table 1 VAP-VOM Central Park 3/3



Thursday, May 19, 2022

Fibertec Project Number:

A08538

Project Identification:

TRW Milford (30046730) /30046730

Submittal Date:

05/17/2022

Mr. Christian Seidel Arcadis U.S., Inc. - Novi 28550 Cabot Drive Suite 500 Novi, MI 48377

Dear Mr. Seidel,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

By Sue Ricketts at 12:13 PM, May 19, 2022

For Daryl P. Strandbergh Laboratory Director

Enclosures

Page:



VAP-01-01_15_20

Order: A08538 Date: 05/19/22

168193

Chain of Custody:

Client Project Name: TRW Milford (30046730) Sample No: 1 Collect Date: 05/16/22

Sample Description:

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 16:50

Sample Comments:

Client Identification:

Arcadis U.S., Inc. - Novi

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/N	ıs			Aliq	uot ID:	A08538-001	Matrix:	Ground Water		
Method: EPA 5030C/EPA 8260D				Desc	cription:	VAP-01-01_15_20				
						Prepara	ation	Ana	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U	V+	μg/L	50	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
3. Benzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
4. Bromobenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
5. Bromochloromethane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
6. Bromodichloromethane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
7. Bromoform	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
8. Bromomethane	U	ICV+	μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
9.2-Butanone	U		μg/L	25	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
10. n-Butylbenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
11. sec-Butylbenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
12. tert-Butylbenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
13. Carbon Disulfide	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
15. Chlorobenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
16. Chloroethane	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
17. Chloroform	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
18. Chloromethane	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
19.2-Chlorotoluene	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
21. Dibromochloromethane	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
22. Dibromomethane	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
23.1,2-Dichlorobenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
27. 1,1-Dichloroethane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
28. 1,2-Dichloroethane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
29. 1,1-Dichloroethene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
35. Ethylbenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
36. Ethylene Dibromide	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
37.2-Hexanone	U		μg/L	50	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order: A08538 Date: 05/19/22

Arcadis U.S., Inc. - Novi Sample Description: VAP-01-01_15_20 Chain of Custody: 168193

Client Project Name: **TRW Milford (30046730)** Sample No: 1 Collect Date: **05/16/22**

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 16:50

Sample Comments:

Client Identification:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/	(VOCs) by GC/MS			Aliquot ID: A08538-001			Matrix:			
Method: EPA 5030C/EPA 8260D				Des	cription:	VAP-01-01_15_20				
						Prepara	tion	An	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
38. Isopropylbenzene	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
39.4-Methyl-2-pentanone	U		μg/L	50	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
40. Methylene Chloride	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
‡ 41.2-Methylnaphthalene	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
42. MTBE	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
43. Naphthalene	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
44. n-Propylbenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
45. Styrene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
46.1,1,1,2-Tetrachloroethane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
47.1,1,2,2-Tetrachloroethane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
48. Tetrachloroethene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
49. Toluene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
50.1,2,4-Trichlorobenzene	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
51.1,1,1-Trichloroethane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
‡ 52.1,1,2-Trichloroethane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
53. Trichloroethene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
54. Trichlorofluoromethane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
55.1,2,3-Trichloropropane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
‡ 56.1,2,3-Trimethylbenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
57.1,2,4-Trimethylbenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
58.1,3,5-Trimethylbenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
59. Vinyl Chloride	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
60. m&p-Xylene	U		μg/L	2.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
61. o-Xylene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC
‡ 62. Xylenes	U		μg/L	3.0	1.0	05/18/22	VI22E18A	05/18/22 14:47	VI22E18A	SNC



Order: A08538 Date: 05/19/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-01-02_35_40 Chain of Custody: 168193

Client Project Name: TRW Milford (30046730) Sample No: 2 Collect Date: 05/17/22

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 11:40

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GO	C/MS			Aliq	uot ID:	A08538-002	Matrix:	Ground Water		
Method: EPA 5030C/EPA 8260D				Des	cription:	VAP-01-02_35_40)			
						Prepar	ation	Ana	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U	V+	μg/L	50	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
3. Benzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
4. Bromobenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
5. Bromochloromethane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
6. Bromodichloromethane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
7. Bromoform	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
8. Bromomethane	U	ICV+	μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
9.2-Butanone	U		μg/L	25	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
10. n-Butylbenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
11. sec-Butylbenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
12. tert-Butylbenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
13. Carbon Disulfide	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
15. Chlorobenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
16. Chloroethane	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
17. Chloroform	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
18. Chloromethane	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
19.2-Chlorotoluene	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
21. Dibromochloromethane	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
22. Dibromomethane	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
23.1,2-Dichlorobenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
29.1,1-Dichloroethene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
35. Ethylbenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
36. Ethylene Dibromide	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
37.2-Hexanone	U		μg/L	50	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order: A08538 Date: 05/19/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-01-02_35_40 Chain of Custody: 168193

Client Project Name: TRW Milford (30046730) Sample No: 2 Collect Date: 05/17/22

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 11:40

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS				Aliq	uot ID:	A08538-002	Matrix: Ground Water			
Method: EPA 5030C/EPA 8260D				Des	cription:	VAP-01-02_35_40				
						Prepara	tion	Ana	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
38. Isopropylbenzene	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
39. 4-Methyl-2-pentanone	U		μg/L	50	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
40. Methylene Chloride	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
‡ 41.2-Methylnaphthalene	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
42. MTBE	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
43. Naphthalene	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
44. n-Propylbenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
45. Styrene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
46. 1,1,1,2-Tetrachloroethane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
47.1,1,2,2-Tetrachloroethane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
48. Tetrachloroethene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
49. Toluene	15		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
50.1,2,4-Trichlorobenzene	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
51.1,1,1-Trichloroethane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
‡ 52.1,1,2-Trichloroethane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
53. Trichloroethene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
54. Trichlorofluoromethane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
55. 1,2,3-Trichloropropane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
‡ 56.1,2,3-Trimethylbenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
57. 1,2,4-Trimethylbenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
58.1,3,5-Trimethylbenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
59. Vinyl Chloride	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
60. m&p-Xylene	U		μg/L	2.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC
61. o-Xylene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:13	VI22E18A	SNC

3.0

1.0

05/18/22

U

μg/L

VI22E18A 05/18/22 15:13 VI22E18A SNC

‡ 62. Xylenes



Order: A
Date: 0

168193

A08538 05/19/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-01-03_45_50 Chain of Custody:

Client Project Name: TRW Milford (30046730) Sample No: 3 Collect Date: 05/17/22

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 13:45

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/N	IS			Aliq	uot ID:	A08538-003	Matrix:	Ground Water		
Method: EPA 5030C/EPA 8260D				Desc	cription:	VAP-01-03_45_50				
						Prepara	ation	Ana	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U	V+	μg/L	50	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
3. Benzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
4. Bromobenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
5. Bromochloromethane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
6. Bromodichloromethane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
7. Bromoform	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
8. Bromomethane	U	ICV+	μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
9.2-Butanone	U		μg/L	25	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
10. n-Butylbenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
11. sec-Butylbenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
12. tert-Butylbenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
13. Carbon Disulfide	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
15. Chlorobenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
16. Chloroethane	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
17. Chloroform	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
18. Chloromethane	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
19.2-Chlorotoluene	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
21. Dibromochloromethane	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
22. Dibromomethane	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
23.1,2-Dichlorobenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
24.1,3-Dichlorobenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
25.1,4-Dichlorobenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
29.1,1-Dichloroethene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
30. cis-1,2-Dichloroethene	1.2		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
35. Ethylbenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
36. Ethylene Dibromide	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
37.2-Hexanone	U		μg/L	50	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC

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VAP-01-03_45_50

Order: A08538 05/19/22 Date:

168193

Chain of Custody:

Client Project Name: TRW Milford (30046730) 05/17/22 Sample No: 3 Collect Date:

Sample Description:

Client Project No: 30046730 Sample Matrix: **Ground Water** Collect Time: 13:45

Sample Comments:

Client Identification:

Arcadis U.S., Inc. - Novi

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable #: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS		Aliq	uot ID:	A08538-003	Matrix:	Ground Water				
Method: EPA 5030C/EPA 8260D				Des	cription:	VAP-01-03_45_50				
						Prepara	tion	An	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
38. Isopropylbenzene	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
39. 4-Methyl-2-pentanone	U		μg/L	50	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
40. Methylene Chloride	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
‡ 41.2-Methylnaphthalene	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
42.MTBE	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
43. Naphthalene	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
44. n-Propylbenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
45. Styrene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
46.1,1,1,2-Tetrachloroethane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
47.1,1,2,2-Tetrachloroethane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
48. Tetrachloroethene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
49. Toluene	8.5		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
50.1,2,4-Trichlorobenzene	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
51.1,1,1-Trichloroethane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
‡ 52.1,1,2-Trichloroethane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
53. Trichloroethene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
54. Trichlorofluoromethane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
55.1,2,3-Trichloropropane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
‡ 56.1,2,3-Trimethylbenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
57. 1,2,4-Trimethylbenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
58.1,3,5-Trimethylbenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
59. Vinyl Chloride	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
60. m&p-Xylene	U		μg/L	2.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
61.o-Xylene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC
‡ 62. Xylenes	U		μg/L	3.0	1.0	05/18/22	VI22E18A	05/18/22 15:39	VI22E18A	SNC



Order: A08538 Date: 05/19/22

Matrix: Blank: Equipment

.e. 05/15/2

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Equipment Pump Chain of Custody: 168193

Client Project Name: **TRW Milford (30046730)** Sample No: **4** Collect Date: **05/17/22**

Aliquot ID:

A08538-004

Client Project No: 30046730 Sample Matrix: Blank: Equipment Collect Time: 14:05

Sample Comments:

Volatile Organic Compounds (VOCs) by GC/MS

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Mark and ERA Scoop (ERA scoop)			Aliquot ID: A06336-004 Matrix: Blank: Equipment					ıπ		
Method: EPA 5030C/EPA 8260D				Des	cription:	Equipment Pump				
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prepara P. Date	tion P. Batch	An: A. Date	alysis A. Batch	Init.
1. Acetone	U	V+	μg/L	50	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC
3. Benzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC
4. Bromobenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC
5. Bromochloromethane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC
6. Bromodichloromethane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC
7. Bromoform	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC
8. Bromomethane	U	ICV+	μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC
9.2-Butanone	U		μg/L	25	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC
10. n-Butylbenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC
11. sec-Butylbenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC
12. tert-Butylbenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC
13. Carbon Disulfide	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC
15. Chlorobenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC
16. Chloroethane	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC
17. Chloroform	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC
18. Chloromethane	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC
19.2-Chlorotoluene	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC
21. Dibromochloromethane	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC
22. Dibromomethane	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC
23.1,2-Dichlorobenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC
24.1,3-Dichlorobenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC
25.1,4-Dichlorobenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC
29.1,1-Dichloroethene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC
35. Ethylbenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC
36. Ethylene Dibromide	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC
37.2-Hexanone	U		μg/L	50	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC

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Order: A08538 05/19/22 Date:

168193 Client Identification: Arcadis U.S., Inc. - Novi Sample Description: **Equipment Pump** Chain of Custody:

Client Project Name: TRW Milford (30046730) 05/17/22 Sample No: Collect Date:

Client Project No: 30046730 Sample Matrix: Blank: Equipment Collect Time: 14:05

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable #: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS				Aliq	uot ID:	A08538-004	Matrix: Blank: Equipment				
Method: EPA 5030C/EPA 8260D				Des	cription:	Equipment Pump					
						Prepara	tion	An	alysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.	
38. Isopropylbenzene	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC	
39.4-Methyl-2-pentanone	U		μg/L	50	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC	
40. Methylene Chloride	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC	
‡ 41.2-Methylnaphthalene	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC	
42. MTBE	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC	
43. Naphthalene	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC	
44. n-Propylbenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC	
45. Styrene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC	
46.1,1,1,2-Tetrachloroethane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC	
47.1,1,2,2-Tetrachloroethane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC	
48. Tetrachloroethene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC	
49. Toluene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC	
50.1,2,4-Trichlorobenzene	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC	
51.1,1,1-Trichloroethane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC	
‡ 52.1,1,2-Trichloroethane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC	
53. Trichloroethene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC	
54. Trichlorofluoromethane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC	
55. 1,2,3-Trichloropropane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC	
‡ 56.1,2,3-Trimethylbenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC	
57.1,2,4-Trimethylbenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC	
58.1,3,5-Trimethylbenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC	
59. Vinyl Chloride	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC	
60. m&p-Xylene	U		μg/L	2.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC	
61. o-Xylene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC	
‡ 62. Xylenes	U		μg/L	3.0	1.0	05/18/22	VI22E18A	05/18/22 13:55	VI22E18A	SNC	



Order: A0 Date: 05

Matrix: Blank: Equipment

A08538 05/19/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Equipment Screen Chain of Custody: 168193

Client Project Name: TRW Milford (30046730) Sample No: 5 Collect Date: 05/17/22

A08538-005

Aliquot ID:

Client Project No: 30046730 Sample Matrix: Blank: Equipment Collect Time: 14:10

Sample Comments:

Volatile Organic Compounds (VOCs) by GC/MS

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

volunic organic compounds (voos) by co	,					A00000 000				
Method: EPA 5030C/EPA 8260D				Des	cription:	Equipment Screen	n			
						Prepara	tion	An	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U	V+	μg/L	50	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
3. Benzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
4. Bromobenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
5. Bromochloromethane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
6. Bromodichloromethane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
7. Bromoform	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
8. Bromomethane	U	ICV+	μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
9.2-Butanone	U		μg/L	25	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
10. n-Butylbenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
11. sec-Butylbenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
12. tert-Butylbenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
13. Carbon Disulfide	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
15. Chlorobenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
16. Chloroethane	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
17. Chloroform	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
18. Chloromethane	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
19.2-Chlorotoluene	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
21. Dibromochloromethane	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
22. Dibromomethane	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
23.1,2-Dichlorobenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
24.1,3-Dichlorobenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
29.1,1-Dichloroethene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
35. Ethylbenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
36. Ethylene Dibromide	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
	U		μg/L	50	1.0	05/18/22	VI22E18A			

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Order: A08538 05/19/22 Date:

168193 Client Identification: Arcadis U.S., Inc. - Novi Sample Description: **Equipment Screen** Chain of Custody:

Client Project Name: TRW Milford (30046730) 05/17/22 Sample No: 5 Collect Date:

Client Project No: 30046730 Sample Matrix: Blank: Equipment Collect Time: 14:10

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS			Aliq	uot ID:	A08538-005	Matrix:	Blank: Equipme	nt		
Method: EPA 5030C/EPA 8260D				Des	cription:	Equipment Screen				
						Preparat	ion	An	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
38. Isopropylbenzene	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
39.4-Methyl-2-pentanone	U		μg/L	50	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
40. Methylene Chloride	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
‡ 41.2-Methylnaphthalene	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
42. MTBE	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
43. Naphthalene	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
44. n-Propylbenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
45. Styrene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
46.1,1,1,2-Tetrachloroethane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
47.1,1,2,2-Tetrachloroethane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
48. Tetrachloroethene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
49. Toluene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
50.1,2,4-Trichlorobenzene	U		μg/L	5.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
51.1,1,1-Trichloroethane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
‡ 52.1,1,2-Trichloroethane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
53. Trichloroethene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
54. Trichlorofluoromethane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
55. 1,2,3-Trichloropropane	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
56. 1,2,3-Trimethylbenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
57. 1,2,4-Trimethylbenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
58.1,3,5-Trimethylbenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
59. Vinyl Chloride	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
60. m&p-Xylene	U		μg/L	2.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
61. o-Xylene	U		μg/L	1.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC
‡ 62. Xylenes	U		μg/L	3.0	1.0	05/18/22	VI22E18A	05/18/22 14:21	VI22E18A	SNC



Analytical Laboratory Report Laboratory Project Number: A08538

Order: A08538 Date: 05/19/22

Definitions/ Qualifiers:

- A: Spike recovery or precision unusable due to dilution.
- B: The analyte was detected in the associated method blank.
- E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
- J: The concentration is an estimated value.
- M: Modified Method
- U: The analyte was not detected at or above the reporting limit.
- X: Matrix Interference has resulted in a raised reporting limit or distorted result.
- W: Results reported on a wet-weight basis.
- *: Value reported is outside QC limits

Exception Summary:

ICV+ : Recovery in the associated initial calibration verification sample exceeds the upper control limit. Results may be biased high.

V+ : Recovery in the associated continuing calibration verification sample (CCV) exceeds the upper control limit. Results may be biased high

Analysis Locations:

All analyses performed in Holt.



Accreditation Number(s):

T104704518-19-8 (TX)



Order ID: A08538 Page: 1 of 5 Date: 05/19/22

VI22E18A: Method Blank (MB)

Run Time: VI22E18A.MB 05/18/2022 12:10 [VI22E18A]			
	MB Result	MB MB RDL		
		Qualifier		
Analyte	μg/L	μg/L		
Acetone	U	50		
Acrylonitrile	U	2.0		
Benzene	U	1.0		
Bromobenzene	U	1.0		
Bromochloromethane	U	1.0		
Bromodichloromethane	U	1.0		
Bromoform	U	1.0		
Bromomethane	U	5.0		
2-Butanone	U	25		
n-Butylbenzene	U	1.0		
sec-Butylbenzene	U	1.0		
tert-Butylbenzene	U	1.0		
Carbon Disulfide	U	5.0		
Carbon Tetrachloride	U	1.0		
Chlorobenzene	U	1.0		
Chloroethane	U	5.0		
Chloroform	U	1.0		
Chloromethane	U	5.0		
2-Chlorotoluene	U	5.0		
1,2-Dibromo-3-chloropropane (SIM)	U	1.0		
Dibromochloromethane	U	5.0		
Dibromomethane	U	5.0		
1,2-Dichlorobenzene	U	1.0		
1,3-Dichlorobenzene	U	1.0		
1,4-Dichlorobenzene	U	1.0		
Dichlorodifluoromethane	U	5.0		
1,1-Dichloroethane	U	1.0		
1,2-Dichloroethane	U	1.0		
1,1-Dichloroethene	U	1.0		
cis-1,2-Dichloroethene	U	1.0		
trans-1,2-Dichloroethene	U	1.0		
1,2-Dichloropropane	U	1.0		
cis-1,3-Dichloropropene	U	0.50		
	1914 Holloway Drive 11766 E. Grand River		F: (517) 699-0388 F: (810) 220-3311	

T: (231) 775-8368

F: (231) 775-8584

Cadillac, MI 49601

8660 S. Mackinaw Trail



Order ID: A08538 Page: 2 of 5 Date: 05/19/22

VI22E18A: Method Blank (MB)

Run Time: VI22E18A.MB 05/18/2022 12:10 [VI22E18A]			
	MB Result	MB	MB RDL
		Qualifier	
Analyte	μg/L		μg/L
trans-1,3-Dichloropropene	U		0.50
Ethylbenzene	U		1.0
Ethylene Dibromide	U		1.0
2-Hexanone	U		50
Isopropylbenzene	U		5.0
4-Methyl-2-pentanone	U		50
Methylene Chloride	U		5.0
2-Methylnaphthalene	U		5.0
MTBE	U		5.0
Naphthalene	U		5.0
n-Propylbenzene	U		1.0
Styrene	U		1.0
1,1,1,2-Tetrachloroethane	U		1.0
1,1,2,2-Tetrachloroethane	U		1.0
Tetrachloroethene	U		1.0
Toluene	U		1.0
1,2,4-Trichlorobenzene	U		5.0
1,1,1-Trichloroethane	U		1.0
1,1,2-Trichloroethane	U		1.0
Trichloroethene	U		1.0
Trichlorofluoromethane	U		1.0
1,2,3-Trichloropropane	U		1.0
1,2,3-Trimethylbenzene	U		1.0
1,2,4-Trimethylbenzene	U		1.0
1,3,5-Trimethylbenzene	U		1.0
Vinyl Chloride	U		1.0
m&p-Xylene	U		2.0
o-Xylene	U		1.0
4-Bromofluorobenzene(S)	94		80-120
Dibromofluoromethane(S)	95		80-120
1,2-Dichloroethane-d4(S)	92		80-120
Toluene-d8(S)	97		80-120

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order ID: A08538 Page: 3 of 5 Date: 05/19/22

VI22E18A: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Am		LOS NEC.	Nec. Lillins	Qualifier	Spike Amoun		Rec.	Qualifier	KFD	KFD LIIIIIS	Qualifier
Analyte	μg/L	μg/L	%	%	quamo	μg/L	μg/L	%	quamor	%	%	Qualifici
Acetone	50.0	30.9	62	54-140		50.0	30.0	60		3	20	
Acrylonitrile	50.0	47.4	95	70-130		50.0	47.0	94		1	20	
Benzene	50.0	46.4	93	80-120		50.0	45.8	92		1	20	
Bromobenzene	50.0	45.4	91	75-125		50.0	45.6	91		0	20	
Bromochloromethane	50.0	43.6	87	70-130		50.0	42.4	85		2	20	
Bromodichloromethane	50.0	46.1	92	75-120		50.0	46.0	92		0	20	
Bromoform	50.0	51.6	103	70-130		50.0	51.0	102		1	20	
Bromomethane	50.0	60.1	120	68-135		50.0	58.3	117		3	20	
2-Butanone	50.0	41.7	83	70-148		50.0	40.9	82		1	20	
n-Butylbenzene	50.0	56.4	113	70-133		50.0	55.9	112		1	20	
sec-Butylbenzene	50.0	50.9	102	70-125		50.0	50.5	101		1	20	
ert-Butylbenzene	50.0	50.9	102	70-130		50.0	50.7	101		1	20	
Carbon Disulfide	50.0	45.9	92	70-130		50.0	43.6	87		6	20	
Carbon Tetrachloride	50.0	49.1	98	70-130		50.0	47.6	95		3	20	
Chlorobenzene	50.0	48.7	97	80-120		50.0	48.3	97		0	20	
Chloroethane	50.0	46.1	92	61-130		50.0	45.0	90		2	20	
Chloroform	50.0	43.6	87	80-120		50.0	42.7	85		2	20	
Chloromethane	50.0	48.7	97	67-125		50.0	48.4	97		0	20	
2-Chlorotoluene	50.0	47.6	95	75-125		50.0	47.3	95		0	20	
1,2-Dibromo-3-chloropropane (SIM)	50.0	47.9	96	70-130		50.0	48.4	97		1	20	
Dibromochloromethane	50.0	46.2	92	70-130		50.0	46.9	94		2	20	
Dibromomethane	50.0	50.7	101	75-125		50.0	51.2	102		1	20	
1,2-Dichlorobenzene	50.0	50.0	100	70-120		50.0	50.7	101		1	20	
1,3-Dichlorobenzene	50.0	51.5	103	75-125		50.0	51.5	103		0	20	
1,4-Dichlorobenzene	50.0	48.6	97	75-125		50.0	48.5	97		0	20	
Dichlorodifluoromethane	50.0	47.6	95	70-136		50.0	44.8	90		5	20	
1,1-Dichloroethane	50.0	44.2	88	70-130		50.0	42.5	85		3	20	
1,2-Dichloroethane	50.0	42.5	85	70-130		50.0	42.5	85		0	20	
1,1-Dichloroethene	50.0	42.9	86	78-120		50.0	41.0	82		5	20	
cis-1,2-Dichloroethene	50.0	42.7	85	70-125		50.0	41.4	83		2	20	
rans-1,2-Dichloroethene	50.0	46.1	92	70-130		50.0	44.2	88		4	20	
1,2-Dichloropropane	50.0	47.2	94	80-121		50.0	46.9	94		0	20	
	50.0	47.6	95	70-130		50.0	47.3	95		0	20	

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Order ID: A08538 Page: 4 of 5 Date: 05/19/22

VI22E18A: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VI22E18A.LCS: 05/18/2022 10:	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Am		LOO NEC.	Nec. Lillins	Qualifier	Spike Amoun		Rec.	Qualifier	INI D	KI D LIIIIIG	Qualifier
Analyte	μg/L	μg/L	%	%	quamo	μg/L	μg/L	%	quamoi	%	%	Quamo
trans-1,3-Dichloropropene	50.0	51.6	103	70-132		50.0	51.5	103		0	20	
Ethylbenzene	50.0	49.7	99	80-120		50.0	48.7	97		2	20	
Ethylene Dibromide	50.0	50.1	100	80-120		50.0	49.8	100		0	20	
2-Hexanone	50.0	43.8	88	70-130		50.0	43.3	87		1	20	
sopropylbenzene	50.0	52.0	104	75-125		50.0	50.8	102		2	20	
4-Methyl-2-pentanone	50.0	50.8	102	70-130		50.0	51.5	103		1	20	
Methylene Chloride	50.0	43.3	87	70-130		50.0	42.2	84		4	20	
2-Methylnaphthalene	50.0	52.3	105	70-130		50.0	51.7	103		2	20	
МТВЕ	50.0	44.9	90	70-125		50.0	44.5	89		1	20	
Naphthalene	50.0	52.7	105	70-130		50.0	53.1	106		1	20	
n-Propylbenzene	50.0	50.3	101	70-130		50.0	49.9	100		1	20	
Styrene	50.0	46.7	93	70-130		50.0	46.4	93		0	20	
,1,1,2-Tetrachloroethane	50.0	49.9	100	80-130		50.0	50.2	100		0	20	
,1,2,2-Tetrachloroethane	50.0	54.0	108	70-130		50.0	54.0	108		0	20	
Tetrachloroethene	50.0	54.1	108	70-130		50.0	52.8	106		2	20	
Toluene	50.0	48.7	97	80-120		50.0	47.8	96		1	20	
1,2,4-Trichlorobenzene	50.0	56.3	113	70-130		50.0	56.3	113		0	20	
1,1,1-Trichloroethane	50.0	46.4	93	70-130		50.0	44.8	90		3	20	
1,1,2-Trichloroethane	50.0	47.5	95	75-125		50.0	47.3	95		0	20	
Trichloroethene	50.0	45.0	90	71-125		50.0	44.4	89		1	20	
Trichlorofluoromethane	50.0	49.8	100	70-133		50.0	48.0	96		4	20	
1,2,3-Trichloropropane	50.0	49.5	99	75-125		50.0	50.2	100		1	20	
1,2,3-Trimethylbenzene	50.0	47.9	96	70-130		50.0	48.5	97		1	20	
1,2,4-Trimethylbenzene	50.0	51.5	103	75-130		50.0	51.6	103		0	20	
1,3,5-Trimethylbenzene	50.0	50.9	102	75-130		50.0	50.8	102		0	20	
/inyl Chloride	50.0	48.5	97	74-125		50.0	45.5	91		6	20	
n&p-Xylene	100	99.6	100	75-130		100	97.7	98		2	20	
o-Xylene	50.0	50.0	100	80-120		50.0	49.4	99		1	20	
4-Bromofluorobenzene(S)			99	80-120				97				
Dibromofluoromethane(S)			95	80-120				94				
1,2-Dichloroethane-d4(S)			88	80-120				88				
Toluene-d8(S)			97	80-120				97				

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order ID: A08538 Page: 5 of 5 Date: 05/19/22

Definitions/ Qualifiers:

- U: The analyte was not detected at or above the Reporting Limit (RL).
- *: Value reported is outside QC limits

Exception Summary:

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

Report Generated By:

By Sue Ricketts at 12:20 PM, May 19, 2022

RSN: VI22E18A-221390519121738



Analytical Laboratory

1914 Holloway Drive Holt, MI 48842

Phone: 517 699 0345 Fax: 517 699 0388

email: lab@fibertec.us

8660 S. Mackinaw Trail Cadillac, MI 49601

Phone: 231 775 8368 Fax: 231 775 8584

Industrial Hygiene Services, Inc.

1914 Holloway Drive Holf, MI 48842

Phone: 517 699 0345 Fax: 517 699 0382

email: asbestos@fibertecihs.com

Geoprobe

11766 E. Grand River Rd. Brighton, MI 48116

Phone: 810 220 3300 Fax: 810 220 3311

Chain of Custody #

168193

PAGE ___ of ___

Client Nam	e: TRh)					METERS		Matrix Code Deliverables
Contact Pe	erson: C40	rishour	Seichl						S Soil GW Ground Water Level 2
Project Na	me/ Number:			CODE)				- 1	A Air SW Surface Water Level 3 O Oil www Waste Water Level 4
Email distrib	pution list:	John. t	Telunis Quecadis. com	MATRIX [SEE RIGHT CORNER FOR CODE]	NERS	8261	A C	HOLD SAMPLE	P Wipe X Other: Specify EDD
Quote#	89	g		SEE RIGH	# OF CONTAINERS		i	Ĭ	
Purchase (Order#			TRIX	PF CC	2			
Date	Time	Sample #	Client Sample Descriptor		#	2			Remarks:
5116	1650	(VAP-01-01-15_26	GW					4840 TAT C. S.
5/12	1140	2	VAP-01-02_35_40	GL	3	X			484-TAT
5/17	1345	3	VAP-01-03-45-50	60	3	X			4840 VAT
5/17	14:05	4	Equipment pump	Cx	3	x			Lab water
5/17	14:10	5	VAP-01-02_35_40 VAP-01-03_45-50 Equipment pump Equipment section		2				Lab water
			//						
									Received By Lab
						H			MAY 1 7 2022
									Initials: 55
Comment	:								
Sampled/F	Pelinquished B	y:		Date 57	/ Tim	120Z	vived By:	ile	Shap 5/17/22 2:4
Reinquishe	is frid	ge		Date 5/	/ Tim	1202	garstan &	Se	richt.
Relinquish	ed By: Lis frid	def		Date 57	/Tim	/202	ved By Laboratory:	/	1had 5/17/22 2:4
		Tu	rnaround Time ALL RESULTS WILL BE SENT BY THE EF	ND OF THE BU	JSINE	SS DAY		0	LABUSEONLY
1 k	us. day	2	bus. days3 bus. days		4 k	ous, do	Fibertec (pro	oject number: A08538
5-7	bus, days (sto	indard)	Other (specify time/date requirement)):			Tempera	ature	e upon receipt at Lab: 4,7%
1		//	Ple	ease see	e bo	ack f	ndition s		
11/1	1.1	1		16:			1	_	



Monday, May 23, 2022

Fibertec Project Number: A08565 Amended

Project Identification: TRW Milford (30046730) /30046730

Submittal Date: 05/18/2022

Mr. Christian Seidel Arcadis U.S., Inc. - Novi 28550 Cabot Drive Suite 500 Novi, MI 48377

Dear Mr. Seidel,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

This report has been amended to correct the description on sample -002. This replaces the report issued on May 20th, 2022.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

Bailey WUAh

By Bailey Welch at 8:11 AM, May 23, 2022

For Daryl P. Strandbergh Laboratory Director

Enclosures

lab@fibertec.us



Order: A08565 Date: 05/23/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-01-04_55_60 Chain of Custody: 168192

 Client Project Name:
 TRW Milford (30046730)
 Sample No:
 1
 Collect Date:
 05/17/22

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 16:20

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS

Aliquot ID: A08565-001 Matrix: Ground Water

Method: EPA 5030C/EPA 8260D

Description: VAP-01-04_55_60

						Prepar			alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U	V+	μg/L	50	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
2. Acrylonitrile	U		μg/L	2.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
3. Benzene	U		μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
4. Bromobenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
5. Bromochloromethane	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 11:26	VI22E20A	SNC
6. Bromodichloromethane	U		μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
7. Bromoform	U		μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
8. Bromomethane	U	ICV+	μg/L	5.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
9. 2-Butanone	U		μg/L	25	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
10. n-Butylbenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
11. sec-Butylbenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
12. tert-Butylbenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
13. Carbon Disulfide	U		μg/L	5.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
15. Chlorobenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
16. Chloroethane	U		μg/L	5.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
17. Chloroform	U		μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
18. Chloromethane	U		μg/L	5.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
19. 2-Chlorotoluene	U		μg/L	5.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
21. Dibromochloromethane	U		μg/L	5.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
22. Dibromomethane	U		μg/L	5.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
24.1,3-Dichlorobenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
28. 1,2-Dichloroethane	U		μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
29. 1,1-Dichloroethene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 11:26	VI22E20A	SNC
30. cis-1,2-Dichloroethene	2.1		μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
35. Ethylbenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
36. Ethylene Dibromide	U		μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
37.2-Hexanone	U	V+	μg/L	50	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC

1914 Holloway Drive 11766 E Gand Rver 8660 S Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order: A08565 Date: 05/23/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-01-04_55_60 Chain of Custody: 168192

Client Project Name: TRW Milford (30046730) Sample No: 1 Collect Date: 05/17/22

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 16:20

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS

Aliquot ID: A08565-001 Matrix: Ground Water

Method: EPA 5030C/EPA 8260D

Description: VAP-01-04_55_60

				-					
					Prepar	ation	An	alysis	
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
38. Isopropylbenzene	U	μg/L	5.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
39. 4-Methyl-2-pentanone	U	μg/L	. 50	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
40. Methylene Chloride	U	μg/L	5.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
‡ 41.2-Methylnaphthalene	U	μg/L	5.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
42. MTBE	U	μg/L	5.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
43. Naphthalene	U	μg/L	5.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
44. n-Propylbenzene	U	μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
45. Styrene	U	μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
46. 1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
47.1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
48. Tetrachloroethene	U	μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
49. Toluene	15	μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
50. 1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
‡ 52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
53. Trichloroethene	U	μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
55. 1,2,3-Trichloropropane	U	μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
‡ 56.1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
57. 1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
58. 1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
59. Vinyl Chloride	U	μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
60. m&p-Xylene	U	μg/L	2.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
61. o-Xylene	U	μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC
‡ 62. Xylenes	U	μg/L	3.0	1.0	05/18/22	VI22E18B	05/19/22 01:16	VI22E18B	BRC



Order: A08565 Date: 05/23/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-01-05_65-70 Chain of Custody: 168192

Client Project Name: TRW Milford (30046730) Sample No: 2 Collect Date: 05/18/22

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 10:15

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS

Aliquot ID: A08565-002 Matrix: Ground Water

Method: EPA 5030C/EPA 8260D

Description: VAP-01-05_65-70

						Prepai	ration	Ana	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	lnit.
1. Acetone	U	V+	μg/L	50	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BRO
2. Acrylonitrile	U		μg/L	2.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BRO
3. Benzene	U		μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BRO
4. Bromobenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BRO
5. Bromochloromethane	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 11:52	VI22E20A	SNO
6. Bromodichloromethane	U		μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BRO
7. Bromoform	U		μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BRO
8. Bromomethane	U	ICV+	μg/L	5.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BR
9. 2-Butanone	U		μg/L	25	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BR
10. n-Butylbenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BR
11. sec-Butylbenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BRO
12. tert-Butylbenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BR
13. Carbon Disulfide	U		μg/L	5.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BR
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BR
15. Chlorobenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BR
16. Chloroethane	U		μg/L	5.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BR
17. Chloroform	U		μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BR
18. Chloromethane	U		μg/L	5.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BR
19. 2-Chlorotoluene	U		μg/L	5.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BR
20. 1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BR
21. Dibromochloromethane	U		μg/L	5.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BR
22. Dibromomethane	U		μg/L	5.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BR
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BR
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BR
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BR
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BR
27. 1,1-Dichloroethane	U		μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BR
28. 1,2-Dichloroethane	U		μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BR
29. 1,1-Dichloroethene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 11:52	VI22E20A	SN
30. cis-1,2-Dichloroethene	9.5		μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BR
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BR
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BR
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BR
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BR
35. Ethylbenzene	U		μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BR
36. Ethylene Dibromide	U		μg/L	1.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BR
37.2-Hexanone	U	V+	μg/L	50	1.0	05/18/22	\/IOOF40D	05/19/22 01:43	\/IOOE40D	BR

1914 Holloway Drive 11766 E Grand River 8660 S Madkinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368 F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584

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Order: A08565 Date: 05/23/22

Chain of Custody: 168192

Collect Date: 05/18/22

10:15

Sample Matrix: Ground Water Collect Time:

VAP-01-05_65-70

Client Project No:

Sample Comments:

Client Identification:

Client Project Name:

Arcadis U.S., Inc. - Novi

TRW Milford (30046730)

30046730

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Sample No:

Volatile Organic Compounds (VOCs) by GC/MS

Aliquot ID: A08565-002 Matrix: Ground Water

Method: EPA 5030C/EPA 8260D

Description: VAP-01-05_65-70

Sample Description:

				<u> </u>					
					Prepa	ration	Ana	alysis	
Parameter(s)	Result	Q Unit	s Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
38. Isopropylbenzene	U	μg/l	5.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BRC
39. 4-Methyl-2-pentanone	U	μg/l	_ 50	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BRC
40. Methylene Chloride	U	μg/l	_ 5.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BRC
‡ 41.2-Methylnaphthalene	U	μg/l	5.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BRC
42. MTBE	U	μg/l	_ 5.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BRC
43. Naphthalene	U	μg/l	5.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BRC
44. n-Propylbenzene	U	μg/l	_ 1.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BRC
45. Styrene	U	μg/l	_ 1.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BRC
46. 1,1,1,2-Tetrachloroethane	U	μg/l	_ 1.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BRC
47.1,1,2,2-Tetrachloroethane	U	μg/l	_ 1.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BRC
48. Tetrachloroethene	U	μg/l	_ 1.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BRC
49. Toluene	U	μg/l	_ 1.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BRC
50. 1,2,4-Trichlorobenzene	U	μg/l	5.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BRC
51.1,1,1-Trichloroethane	U	μg/l	_ 1.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BRC
‡ 52.1,1,2-Trichloroethane	U	μg/l	_ 1.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BRC
53. Trichloroethene	U	μg/l	_ 1.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BRC
54. Trichlorofluoromethane	U	μg/l	_ 1.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BRC
55. 1,2,3-Trichloropropane	U	μg/l	_ 1.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BRC
‡ 56.1,2,3-Trimethylbenzene	U	μg/l	_ 1.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BRC
57.1,2,4-Trimethylbenzene	U	μg/l	_ 1.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BRC
58. 1,3,5-Trimethylbenzene	U	μg/l	_ 1.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BRC
59. Vinyl Chloride	U	μg/l	_ 1.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BRC
60. m&p-Xylene	U	μg/l	_ 2.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BRC
61. o-Xylene	U	μg/l	_ 1.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BRC
‡ 62. Xylenes	U	μg/l	3.0	1.0	05/18/22	VI22E18B	05/19/22 01:43	VI22E18B	BRC

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Analytical Laboratory Report Laboratory Project Number: A08565

Order: A08565 Date: 05/23/22

Definitions/ Qualifiers:

- A: Spike recovery or precision unusable due to dilution.
- B: The analyte was detected in the associated method blank.
- E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
- J: The concentration is an estimated value.
- M: Modified Method
- **U:** The analyte was not detected at or above the reporting limit.
- X: Matrix Interference has resulted in a raised reporting limit or distorted result.
- W: Results reported on a wet-weight basis.
- *: Value reported is outside QC limits

Exception Summary:

ICV+ : Recovery in the associated initial calibration verification sample exceeds the upper control limit. Results may be biased

high.

V+ : Recovery in the associated continuing calibration verification sample (CCV) exceeds the upper control limit. Results

may be biased high.

Analysis Locations:

All analyses performed in Holt.



Accreditation Number(s):

T104704518-19-8 (TX)



Order ID: A08565 Page: 1 of 6 Date: 05/20/22

EPA 8260D

VI22E18B: Method Blank (MB)

Run Time: VI22E18B.MB 05/19/2022 00:50 [VI				
	MB Result	MB MB RDL		
		Qualifier		
Analyte	μg/L	μg/L		
Acetone	U	50		
Acrylonitrile	U	2.0		
Benzene	U	1.0		
Bromobenzene	U	1.0		
Bromodichloromethane	U	1.0		
Bromoform	U	1.0		
Bromomethane	U	5.0		
2-Butanone	U	25		
n-Butylbenzene	U	1.0		
sec-Butylbenzene	U	1.0		
tert-Butylbenzene	U	1.0		
Carbon Disulfide	U	5.0		
Carbon Tetrachloride	U	1.0		
Chlorobenzene	U	1.0		
Chloroethane	U	5.0		
Chloroform	U	1.0		
Chloromethane	U	5.0		
2-Chlorotoluene	U	5.0		
1,2-Dibromo-3-chloropropane (SIM)	U	1.0		
Dibromochloromethane	U	5.0		
Dibromomethane	U	5.0		
1,2-Dichlorobenzene	U	1.0		
1,3-Dichlorobenzene	U	1.0		
1,4-Dichlorobenzene	U	1.0		
Dichlorodifluoromethane	U	5.0		
1,1-Dichloroethane	U	1.0		
1,2-Dichloroethane	U	1.0		
cis-1,2-Dichloroethene	U	1.0		
trans-1,2-Dichloroethene	U	1.0		
1,2-Dichloropropane	U	1.0		
cis-1,3-Dichloropropene	U	0.50		
trans-1,3-Dichloropropene	U	0.50		
Ethylbenzene	U	1.0		
	1914 Holloway Drive	Holt, MI 48842	T: (517) 699-0345	F: (517) 699-0388

 11766 E Grand River
 Brighton, MI 48116
 T: (810) 220-3300
 F: (810) 220-3311

 8660 S Madkinaw Trail
 Cadillac, MI 49601
 T: (231) 775-8368
 F: (231) 775-8584



Order ID: A08565
Page: 2 of 6
Date: 05/20/22

VI22E18B: Method Blank (MB)

Run Time: VI22E18B.MB 05/19/2022 00:50 [VI22E18	B]		
	MB Result	MB	MB RDL
		Qualifier	
Analyte	μg/L		μg/L
Ethylene Dibromide	U		1.0
2-Hexanone	U		50
Isopropylbenzene	U		5.0
4-Methyl-2-pentanone	U		50
Methylene Chloride	U		5.0
2-Methylnaphthalene	U		5.0
MTBE	U		5.0
Naphthalene	U		5.0
n-Propylbenzene	U		1.0
Styrene	U		1.0
1,1,1,2-Tetrachloroethane	U		1.0
1,1,2,2-Tetrachloroethane	U		1.0
Tetrachloroethene	U		1.0
Toluene	U		1.0
1,2,4-Trichlorobenzene	U		5.0
1,1,1-Trichloroethane	U		1.0
1,1,2-Trichloroethane	U		1.0
Trichloroethene	U		1.0
Trichlorofluoromethane	U		1.0
1,2,3-Trichloropropane	U		1.0
1,2,3-Trimethylbenzene	U		1.0
1,2,4-Trimethylbenzene	U		1.0
1,3,5-Trimethylbenzene	U		1.0
Vinyl Chloride	U		1.0
m&p-Xylene	U		2.0
o-Xylene	U		1.0
4-Bromofluorobenzene(S)	95		80-120
Dibromofluoromethane(S)	94		80-120
1,2-Dichloroethane-d4(S)	94		80-120
Toluene-d8(S)	97		80-120

1914 Holloway Drive 11766 E Grand River 8660 S Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order ID: A08565
Page: 3 of 6
Date: 05/20/22

VI22E18B: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VI22E18B.LCS: 05/18/2022 23:31 [VI22E18B] VI22E1	8B.LCSD: 05/18/20	22 23:57 [VI22I	E18B]								
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Amount Qualifier Spike Amount Resu		unt Result	Rec.	Qualifier			Qualifier				
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
Acetone	50.0	29.0	58	54-140		50.0	28.6	57		2	20	
Acrylonitrile	50.0	43.1	86	70-130		50.0	43.7	87		1	20	
Benzene	50.0	44.8	90	80-120		50.0	43.6	87		3	20	
Bromobenzene	50.0	43.8	88	75-125		50.0	42.0	84		5	20	
Bromodichloromethane	50.0	45.7	91	75-120		50.0	45.1	90		1	20	
Bromoform	50.0	53.4	107	70-130		50.0	52.3	105		2	20	
Bromomethane	50.0	54.9	110	68-135		50.0	52.1	104		6	20	
2-Butanone	50.0	38.7	77	70-148		50.0	37.7	75		3	20	
n-Butylbenzene	50.0	53.3	107	70-133		50.0	51.0	102		5	20	
sec-Butylbenzene	50.0	49.3	99	70-125		50.0	46.9	94		5	20	
tert-Butylbenzene	50.0	50.4	101	70-130		50.0	48.2	96		5	20	
Carbon Disulfide	50.0	40.2	80	70-130		50.0	38.6	77		4	20	
Carbon Tetrachloride	50.0	50.7	101	70-130		50.0	48.7	97		4	20	
Chlorobenzene	50.0	48.0	96	80-120		50.0	47.2	94		2	20	
Chloroethane	50.0	40.7	81	61-130		50.0	40.2	80		1	20	
Chloroform	50.0	42.8	86	80-120		50.0	41.1	82		5	20	
Chloromethane	50.0	42.3	85	67-125		50.0	43.3	87		2	20	
2-Chlorotoluene	50.0	46.2	92	75-125		50.0	44.3	89		3	20	
1,2-Dibromo-3-chloropropane (SIM)	50.0	50.1	100	70-130		50.0	48.1	96		4	20	
Dibromochloromethane	50.0	47.8	96	70-130		50.0	47.1	94		2	20	
Dibromomethane	50.0	52.3	105	75-125		50.0	50.8	102		3	20	
1,2-Dichlorobenzene	50.0	50.0	100	70-120		50.0	48.2	96		4	20	
1,3-Dichlorobenzene	50.0	50.9	102	75-125		50.0	48.7	97		5	20	
1,4-Dichlorobenzene	50.0	48.1	96	75-125		50.0	45.8	92		4	20	
Dichlorodifluoromethane	50.0	45.1	90	70-136		50.0	43.0	86		5	20	
1,1-Dichloroethane	50.0	40.7	81	70-130		50.0	39.7	79		3	20	
1,2-Dichloroethane	50.0	42.8	86	70-130		50.0	42.3	85		1	20	
cis-1,2-Dichloroethene	50.0	39.3	79	70-125		50.0	38.6	77		3	20	
trans-1,2-Dichloroethene	50.0	42.3	85	70-130		50.0	41.1	82		4	20	
1,2-Dichloropropane	50.0	44.7	89	80-121		50.0	44.4	89		0	20	
cis-1,3-Dichloropropene	50.0	45.5	91	70-130		50.0	44.6	89		2	20	
trans-1,3-Dichloropropene	50.0	49.9	100	70-132		50.0	49.9	100		0	20	
Ethylbenzene	50.0	48.5	97	80-120		50.0	47.3	95		2	20	

1914 Holloway Drive 11766 E Grand River 8660 S Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order ID: A08565
Page: 4 of 6
Date: 05/20/22

VI22E18B: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VI22E18B.LCS: 05/18/2022 23:	31 [VI22E18B] VI22E18	BB.LCSD: 05/18/20	22 23:57 [VI22	E18B]								
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Amo	ount			Qualifier	•						Qualifier
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
Ethylene Dibromide	50.0	49.8	100	80-120		50.0	48.9	98		2	20	
2-Hexanone	50.0	41.6	83	70-130		50.0	41.7	83		0	20	
Isopropylbenzene	50.0	51.1	102	75-125		50.0	49.7	99		3	20	
4-Methyl-2-pentanone	50.0	50.5	101	70-130		50.0	49.2	98		3	20	
Methylene Chloride	50.0	38.8	78	70-130		50.0	38.1	76		3	20	
2-Methylnaphthalene	50.0	52.2	104	70-130		50.0	49.0	98		6	20	
MTBE	50.0	42.4	85	70-125		50.0	42.0	84		1	20	
Naphthalene	50.0	52.9	106	70-130		50.0	51.0	102		4	20	
n-Propylbenzene	50.0	48.3	97	70-130		50.0	46.7	93		4	20	
Styrene	50.0	45.2	90	70-130		50.0	44.8	90		0	20	
1,1,1,2-Tetrachloroethane	50.0	50.7	101	80-130		50.0	48.8	98		3	20	
1,1,2,2-Tetrachloroethane	50.0	52.5	105	70-130		50.0	51.3	103		2	20	
Tetrachloroethene	50.0	54.3	109	70-130		50.0	52.7	105		4	20	
Toluene	50.0	47.3	95	80-120		50.0	46.2	92		3	20	
1,2,4-Trichlorobenzene	50.0	56.0	112	70-130		50.0	53.3	107		5	20	
1,1,1-Trichloroethane	50.0	45.6	91	70-130		50.0	44.1	88		3	20	
1,1,2-Trichloroethane	50.0	47.5	95	75-125		50.0	46.6	93		2	20	
Trichloroethene	50.0	45.6	91	71-125		50.0	43.8	88		3	20	
Trichlorofluoromethane	50.0	48.4	97	70-133		50.0	47.0	94		3	20	
1,2,3-Trichloropropane	50.0	50.4	101	75-125		50.0	48.6	97		4	20	
1,2,3-Trimethylbenzene	50.0	46.7	93	70-130		50.0	45.3	91		2	20	
1,2,4-Trimethylbenzene	50.0	50.5	101	75-130		50.0	48.3	97		4	20	
1,3,5-Trimethylbenzene	50.0	49.6	99	75-130		50.0	47.3	95		4	20	
Vinyl Chloride	50.0	43.9	88	74-125		50.0	42.8	86		2	20	
m&p-Xylene	100	97.2	97	75-130		100	94.8	95		2	20	
o-Xylene	50.0	48.9	98	80-120		50.0	47.7	95		3	20	
4-Bromofluorobenzene(S)			97	80-120				98				
Dibromofluoromethane(S)			91	80-120				93				
1,2-Dichloroethane-d4(S)			90	80-120				89				
Toluene-d8(S)			97	80-120				97				

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Order ID: A08565
Page: 5 of 6
Date: 05/20/22

VI22E20A: Method Blank (MB)

Run Time: VI22E20A.MB 05/20/2	022 11:00 [VI22E20A]	
	MB Result	MB MB RDL
		Qualifier
Analyte	μg/L	μg/L
Bromochloromethane	U	1.0
1,1-Dichloroethene	U	1.0
4-Bromofluorobenzene(S)	93	80-120
Dibromofluoromethane(S)	101	80-120
1,2-Dichloroethane-d4(S)	92	80-120
Toluene-d8(S)	98	80-120

VI22E20A: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VI22E20A.LCS: 05/20/2022 09:42 [VI22E20A] VI22E20A.LCSD: 05/20/2022 10:08 [VI22E20A]												
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Amour	nt			Qualifier	Spike Amour	nt Result	Rec.	Qualifier			Qualifier
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
Bromochloromethane	50.0	48.2	96	70-130		50.0	45.7	91		5	20	
1,1-Dichloroethene	50.0	44.4	89	78-120		50.0	42.6	85		5	20	
4-Bromofluorobenzene(S)			98	80-120				98				
Dibromofluoromethane(S)			97	80-120				96				
1,2-Dichloroethane-d4(S)			87	80-120				87				
Toluene-d8(S)			99	80-120				99				



Order ID: A08565
Page: 6 of 6
Date: 05/20/22

Definitions/ Qualifiers:

- U: The analyte was not detected at or above the Reporting Limit (RL).
- *: Value reported is outside QC limits

Exception Summary:

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

Report Generated By:

By Bailey Welch at 3:29 PM, May 20, 2022

RSN: VI22E20A-221400520152905



Analytical Laboratory

1914 Holloway Drive Holt, MI 48842

Phone: 517 699 0345 Fax: 517 699 0388

Fax: 231 775 8584

8660 S. Mackinaw Trail Cadillac, MI 49601 Phone: 231 775 8368

Industrial Hygiene Services, Inc.

1914 Holloway Drive Holf, MI 48842

Phone: 517 699 0345 Fax: 517 699 0382

Geoprobe

11766 E. Grand River Rd. Brighton, MI 48116

Phone: 810 220 3300 Fax: 810 220 3311

Chain of Custody #

168192

PAGE ____ of ____

email: lab@fibertec.us			•	email: asbestos@fibertecit	hs.com	
Client Name: TRW				PARAMETER:	S	Matrix Code Deliverables
Contact Person: Crishin Sciche						S Soil Gw Ground Water Level 2
roject Name/ Number: TPW Miller d	CODE		0			A Air SW Surface Water Level 3 B O Oil ww Waste Water Level 4
nail distribution list:	HT CORNER FOR	CONTAINERS	326			P Wipe X Other: Specify EDD
uote#	SEE RIG	ATNO TA	1			
urchase Order#	MATRIX	5 4	2			
Date Time Sample # Client Sample Descriptor	Σ	# OF	3			Remarks:
717 16:20 4 VAP-01-04_55_60	GL	3	Y			48 4 TAT
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updated						Received By Lab
						11111 4 0 0000
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omments:	Date	/ Time		Received	Rv.	
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Proceeds processing Sichel	Date 5	/ Time	122	1340 Received	By Laboratory:	1 hadres 5/18/22 1:
Turnaround Time ALL RESULTS WILL BE SENT BY THE EN	ND OF THE BU	USINES	S DAY	Ne	ar a	EAD USE OILE
1 bus. day2 bus. days3 bus. days		4 bı	us. days		Fibertec	project number: A08565
5-7 bus. days (standard) Other (specify time/date requirement)):			_	Tempero	ture upon receipt at Lab: 3, 5 6
A PL		- la -	ol for	torms and condit	tions 1	



Monday, May 23, 2022

Fibertec Project Number: A08596

Project Identification: TRW Milford (30046730) /30046730

Submittal Date: 05/19/2022

Mr. Christian Seidel Arcadis U.S., Inc. - Novi 28550 Cabot Drive Suite 500 Novi, MI 48377

Dear Mr. Seidel,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

Bailey Wllch
By Bailey Welch at 4:27 PM, May 23, 2022

For Daryl P. Strandbergh Laboratory Director

Enclosures



Order: A08596 Date: 05/23/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-01-06_75_80 Chain of Custody: 168191

Client Project Name: **TRW Milford (30046730)** Sample No: 1 Collect Date: **05/18/22**

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 14:20

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS	Aliquot ID:	A08596-001	Matrix: Ground Water
Method: EPA 5030C/EPA 8260D	Description:	VAP-01-06_75_80	

						Prepai			alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	In
1. Acetone	U		μg/L	50	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SN
2. Acrylonitrile	U		μg/L	2.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SN
3. Benzene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SN
4. Bromobenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SN
5. Bromochloromethane	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SN
6. Bromodichloromethane	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SN
7. Bromoform	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SN
8. Bromomethane	U	L+ ICV+	μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SN
9. 2-Butanone	U		μg/L	25	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SN
10. n-Butylbenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SN
11. sec-Butylbenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SN
12. tert-Butylbenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	S١
13. Carbon Disulfide	U		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SN
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SN
15. Chlorobenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SN
16. Chloroethane	U		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SN
17. Chloroform	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SN
18. Chloromethane	U		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	S١
19. 2-Chlorotoluene	U		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SN
20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SN
21. Dibromochloromethane	U		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SN
22. Dibromomethane	U		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	S١
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SN
24.1,3-Dichlorobenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	S١
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SN
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	S١
27.1,1-Dichloroethane	1.9		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SN
28. 1,2-Dichloroethane	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SN
29. 1,1-Dichloroethene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SN
30. cis-1,2-Dichloroethene	21		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SN
31. trans-1,2-Dichloroethene	1.2		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SN
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SN
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SN
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SI
35. Ethylbenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SN
36. Ethylene Dibromide	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SN

1914 Holloway Drive 11766 E Grand River 8660 S Madkinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order: A08596 05/23/22 Date:

Client Identification: Arcadis U.S., Inc. - Novi Chain of Custody: 168191 Sample Description: VAP-01-06_75_80

Client Project Name: TRW Milford (30046730) Collect Date: 05/18/22 Sample No: 1

Description: VAP-01-06_75_80

Client Project No: 30046730 Sample Matrix: **Ground Water** Collect Time: 14:20

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Aliquot ID: A08596-001 **Matrix: Ground Water** Method: EPA 5030C/EPA 8260D

					Prepar	ation	Analysis		
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
37.2-Hexanone	U	μg/L	50	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SNC
38. Isopropylbenzene	U	μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SNC
39. 4-Methyl-2-pentanone	U	μg/L	50	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SNC
40. Methylene Chloride	U	μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SNC
‡ 41.2-Methylnaphthalene	U	μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SNC
42. MTBE	U	μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SNC
43. Naphthalene	U	μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SNC
44. n-Propylbenzene	U	μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SNC
45. Styrene	U	μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SNC
46.1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SNC
47.1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SNC
48. Tetrachloroethene	U	μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SNC
49. Toluene	1.5	μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SNC
50.1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SNC
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SNC
‡ 52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SNC
53. Trichloroethene	U	μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SNC
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SNC
55. 1,2,3-Trichloropropane	U	μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SNC
‡ 56.1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SNC
57.1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SNC
58. 1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SNC
59. Vinyl Chloride	U	μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SNC
60. m&p-Xylene	U	μg/L	2.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SNC
61. o-Xylene	U	μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SNC
‡ 62. Xylenes	U	μg/L	3.0	1.0	05/20/22	VI22E20A	05/20/22 17:07	VI22E20A	SNC



Order: A0 Date: 05/

Analysis

A. Batch

Init.

SNC

SNC

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SNC

SNC

SNC

SNC

SNC

SNC

SNC

Matrix: Ground Water

A. Date

A08596 05/23/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-01-07_85_90 Chain of Custody: 168191

Client Project Name: TRW Milford (30046730) Sample No: 2 Collect Date: 05/18/22

Aliquot ID:

Description:

Dilution

A08596-002

VAP-01-07_85_90

P. Date

Preparation

P. Batch

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 17:45

Sample Comments:

Parameter(s)

Volatile Organic Compounds (VOCs) by GC/MS

Method: EPA 5030C/EPA 8260D

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Units

Result

U

U

U

U

U

U

2.2

U

U

19

1.3

U

U

U

U

U

μg/L

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μg/L

Q

			-1 - 3						
1. Acetone	U	μg/L	50	1.0	05/20/22	VI22E20A	05/20/22 17:33	VI22E20A	SNC
‡ 2. Acrylonitrile	U	μg/L	2.0	1.0	05/20/22	VI22E20A	05/20/22 17:33	VI22E20A	SNC
3. Benzene	U	μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:33	VI22E20A	SNC
4. Bromobenzene	U	μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:33	VI22E20A	SNC
5. Bromochloromethane	U	μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:33	VI22E20A	SNC
6. Bromodichloromethane	U	μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:33	VI22E20A	SNC
7. Bromoform	U	μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:33	VI22E20A	SNC
8. Bromomethane	U L+ ICV+	μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 17:33	VI22E20A	SNC
9. 2-Butanone	U	μg/L	25	1.0	05/20/22	VI22E20A	05/20/22 17:33	VI22E20A	SNC
10. n-Butylbenzene	U	μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:33	VI22E20A	SNC
11. sec-Butylbenzene	U	μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:33	VI22E20A	SNC
12. tert-Butylbenzene	U	μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:33	VI22E20A	SNC
13. Carbon Disulfide	U	μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 17:33	VI22E20A	SNC
14. Carbon Tetrachloride	U	μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:33	VI22E20A	SNC
15. Chlorobenzene	U	μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:33	VI22E20A	SNC
16. Chloroethane	U	μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 17:33	VI22E20A	SNC
17. Chloroform	U	μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:33	VI22E20A	SNC
18. Chloromethane	U	μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 17:33	VI22E20A	SNC
19. 2-Chlorotoluene	U	μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 17:33	VI22E20A	SNC
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U	μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:33	VI22E20A	SNC

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05/20/22

VI22E20A

VI22F20A

VI22F20A

VI22E20A

VI22F20A

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VI22E20A

VI22E20A

VI22E20A

VI22F20A

Reporting Limit

1914 Holloway Drive 11766 E Grand River 8660 S Madkinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368 F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584

VI22E20A 05/20/22 17:33 VI22E20A SNC

VI22E20A 05/20/22 17:33 VI22E20A SNC

VI22E20A 05/20/22 17:33 VI22E20A SNC

05/20/22 17:33 VI22E20A

05/20/22 17:33 VI22E20A

05/20/22 17:33 VI22E20A

05/20/22 17:33 VI22E20A

05/20/22 17:33 VI22E20A

05/20/22 17:33 VI22E20A

05/20/22 17:33 VI22E20A

05/20/22 17:33 VI22E20A

05/20/22 17:33 VI22E20A

05/20/22 17:33 VI22E20A

VI22E20A 05/20/22 17:33 VI22E20A SNC

05/20/22 17:33

VI22E20A 05/20/22 17:33 VI22E20A

21. Dibromochloromethane

22. Dibromomethane

23. 1,2-Dichlorobenzene

24. 1,3-Dichlorobenzene

25. 1,4-Dichlorobenzene

27. 1,1-Dichloroethane

28.1,2-Dichloroethane

29.1,1-Dichloroethene

30. cis-1,2-Dichloroethene

32.1,2-Dichloropropane

36. Ethylene Dibromide

35. Ethylbenzene

31. trans-1,2-Dichloroethene

33. cis-1,3-Dichloropropene

34. trans-1,3-Dichloropropene

26. Dichlorodifluoromethane

VI22E20A



Order: A08596 Date: 05/23/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-01-07_85_90 Chain of Custody: 168191

Client Project Name: TRW Milford (30046730) Sample No: 2 Collect Date: 05/18/22

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 17:45

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS

Aliquot ID: A08596-002 Matrix: Ground Water

Method: EPA 5030C/EPA 8260D

Description: VAP-01-07_85_90

					•					
						Prepa	ration	Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
37.2-Hexanone	U		μg/L	50	1.0	05/20/22	VI22E20A	05/20/22 17:33	VI22E20A	SNC
38. Isopropylbenzene	U		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 17:33	VI22E20A	SNC
39. 4-Methyl-2-pentanone	U		μg/L	50	1.0	05/20/22	VI22E20A	05/20/22 17:33	VI22E20A	SNC
40. Methylene Chloride	U		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 17:33	VI22E20A	SNC
‡ 41.2-Methylnaphthalene	U		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 17:33	VI22E20A	SNC
42. MTBE	U		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 17:33	VI22E20A	SNC
43. Naphthalene	U		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 17:33	VI22E20A	SNC
44. n-Propylbenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:33	VI22E20A	SNC
45. Styrene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:33	VI22E20A	SNC
46. 1,1,1,2-Tetrachloroethane	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:33	VI22E20A	SNC
47.1,1,2,2-Tetrachloroethane	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:33	VI22E20A	SNC
48. Tetrachloroethene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:33	VI22E20A	SNC
49. Toluene	4.7		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:33	VI22E20A	SNC
50. 1,2,4-Trichlorobenzene	U		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 17:33	VI22E20A	SNC
51.1,1,1-Trichloroethane	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:33	VI22E20A	SNC
‡ 52.1,1,2-Trichloroethane	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:33	VI22E20A	SNC
53. Trichloroethene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:33	VI22E20A	SNC
54. Trichlorofluoromethane	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:33	VI22E20A	SNC
55. 1,2,3-Trichloropropane	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:33	VI22E20A	SNC
‡ 56. 1,2,3-Trimethylbenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:33	VI22E20A	SNC
57. 1,2,4-Trimethylbenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:33	VI22E20A	SNC
58. 1,3,5-Trimethylbenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:33	VI22E20A	SNC
59. Vinyl Chloride	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:33	VI22E20A	SNC
60. m&p-Xylene	U		μg/L	2.0	1.0	05/20/22	VI22E20A	05/20/22 17:33	VI22E20A	SNC
61. o-Xylene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:33	VI22E20A	SNC
‡ 62. Xylenes	U		μg/L	3.0	1.0	05/20/22	VI22E20A	05/20/22 17:33	VI22E20A	SNC



Order: A08596 Date: 05/23/22

Analysis

A. Batch

Init.

SNC

SNC

SNC

SNC

SNC

SNC

SNC

SNC

SNC

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Equipment Flow Valve Chain of Custody: 168191

Client Project Name: TRW Milford (30046730) Sample No: 3 Collect Date: 05/19/22

Aliquot ID:

Description:

Dilution

A08596-003

Equipment Flow Valve

P. Date

Preparation

P. Batch

Matrix: Ground Water

A. Date

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 09:55

Sample Comments:

Parameter(s)

Volatile Organic Compounds (VOCs) by GC/MS

Method: EPA 5030C/EPA 8260D

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Units

Result

U

U

U

U

U

U

U

U

U

U

U

U

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1. Acetone	U	μg/L	50	1.0	05/20/22	VI22E20A	05/20/22 17:59	VI22E20A	SNC
‡ 2. Acrylonitrile	U	μg/L	2.0	1.0	05/20/22	VI22E20A	05/20/22 17:59	VI22E20A	SNC
3. Benzene	U	μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:59	VI22E20A	SNC
4. Bromobenzene	U	μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:59	VI22E20A	SNC
5. Bromochloromethane	U	μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:59	VI22E20A	SNC
6. Bromodichloromethane	U	μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:59	VI22E20A	SNC
7. Bromoform	U	μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:59	VI22E20A	SNC
8. Bromomethane	U L+ ICV+	μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 17:59	VI22E20A	SNC
9. 2-Butanone	U	μg/L	25	1.0	05/20/22	VI22E20A	05/20/22 17:59	VI22E20A	SNC
10. n-Butylbenzene	U	μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:59	VI22E20A	SNC
11. sec-Butylbenzene	U	μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:59	VI22E20A	SNC
12. tert-Butylbenzene	U	μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:59	VI22E20A	SNC
13. Carbon Disulfide	U	μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 17:59	VI22E20A	SNC
14. Carbon Tetrachloride	U	μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:59	VI22E20A	SNC
15. Chlorobenzene	U	μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:59	VI22E20A	SNC
16. Chloroethane	U	μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 17:59	VI22E20A	SNC
17. Chloroform	U	μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:59	VI22E20A	SNC
18. Chloromethane	U	μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 17:59	VI22E20A	SNC
19. 2-Chlorotoluene	U	μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 17:59	VI22E20A	SNC
20.1,2-Dibromo-3-chloropropane (SIM)	U	μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 17:59	VI22E20A	SNC
21. Dibromochloromethane	U	μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 17:59	VI22E20A	SNC
22. Dibromomethane	U	μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 17:59	VI22E20A	SNC

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05/20/22

VI22E20A

VI22E20A

VI22F20A

VI22E20A

VI22E20A

VI22E20A

VI22E20A

Reporting Limit

1914 Holloway Drive 11766 E Grand River 8660 S Madkinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368 F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584

VI22E20A 05/20/22 17:59 VI22E20A SNC

VI22E20A 05/20/22 17:59 VI22E20A SNC

VI22E20A 05/20/22 17:59 VI22E20A SNC

VI22E20A 05/20/22 17:59 VI22E20A SNC

05/20/22 17:59

VI22E20A 05/20/22 17:59 VI22E20A

VI22E20A 05/20/22 17:59 VI22E20A SNC

05/20/22 17:59 VI22E20A

05/20/22 17:59 VI22E20A

05/20/22 17:59 VI22E20A

05/20/22 17:59 VI22E20A

05/20/22 17:59 VI22E20A

05/20/22 17:59 VI22E20A

VI22E20A 05/20/22 17:59 VI22E20A

23.1,2-Dichlorobenzene

24. 1,3-Dichlorobenzene

25. 1,4-Dichlorobenzene

27.1,1-Dichloroethane

28.1,2-Dichloroethane

29.1,1-Dichloroethene

30. cis-1,2-Dichloroethene

32.1,2-Dichloropropane

36. Ethylene Dibromide

35. Ethylbenzene

31. trans-1,2-Dichloroethene

33. cis-1,3-Dichloropropene

34. trans-1,3-Dichloropropene

26. Dichlorodifluoromethane

VI22E20A



Order: A08596 Date: 05/23/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Equipment Flow Valve Chain of Custody: 168191

Client Project Name: TRW Milford (30046730) Sample No: 3 Collect Date: 05/19/22

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 09:55

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS

Aliquot ID: A08596-003 Matrix: Ground Water

Method: EPA 5030C/EPA 8260D

Description: Equipment Flow Valve

					Prep	Preparation		Analysis		
Parameter(s)	Result	Q Uni	ts Reporting Lir	nit Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.	
37.2-Hexanone	U	μg	L 5	50 1.0	05/20/22	VI22E20A	05/20/22 17:59	VI22E20A	SNO	
38. Isopropylbenzene	U	μg	L 5	.0 1.0	05/20/22	VI22E20A	05/20/22 17:59	VI22E20A	SNO	
39. 4-Methyl-2-pentanone	U	μg	L 5	50 1.0	05/20/22	VI22E20A	05/20/22 17:59	VI22E20A	SNO	
40. Methylene Chloride	U	μg	L 5.	.0 1.0	05/20/22	VI22E20A	05/20/22 17:59	VI22E20A	SNO	
‡ 41.2-Methylnaphthalene	U	μg	L 5.	.0 1.0	05/20/22	VI22E20A	05/20/22 17:59	VI22E20A	SNO	
42. MTBE	U	μg	L 5.	.0 1.0	05/20/22	VI22E20A	05/20/22 17:59	VI22E20A	SNO	
43. Naphthalene	U	μg	L 5.	.0 1.0	05/20/22	VI22E20A	05/20/22 17:59	VI22E20A	SNO	
44. n-Propylbenzene	U	μg	L 1.	.0 1.0	05/20/22	VI22E20A	05/20/22 17:59	VI22E20A	SNO	
45. Styrene	U	μg	L 1.	.0 1.0	05/20/22	VI22E20A	05/20/22 17:59	VI22E20A	SNO	
46.1,1,1,2-Tetrachloroethane	U	μg	L 1.	.0 1.0	05/20/22	VI22E20A	05/20/22 17:59	VI22E20A	SN	
47.1,1,2,2-Tetrachloroethane	U	μg	L 1.	.0 1.0	05/20/22	VI22E20A	05/20/22 17:59	VI22E20A	SN	
48. Tetrachloroethene	U	μg	L 1.	.0 1.0	05/20/22	VI22E20A	05/20/22 17:59	VI22E20A	SN	
49. Toluene	2.3	μg	L 1.	.0 1.0	05/20/22	VI22E20A	05/20/22 17:59	VI22E20A	SNO	
50. 1,2,4-Trichlorobenzene	U	μg	L 5	.0 1.0	05/20/22	VI22E20A	05/20/22 17:59	VI22E20A	SNO	
51.1,1,1-Trichloroethane	U	μg	L 1.	.0 1.0	05/20/22	VI22E20A	05/20/22 17:59	VI22E20A	SNO	
52.1,1,2-Trichloroethane	U	μg	L 1.	.0 1.0	05/20/22	VI22E20A	05/20/22 17:59	VI22E20A	SNO	
53. Trichloroethene	U	μg	L 1.	.0 1.0	05/20/22	VI22E20A	05/20/22 17:59	VI22E20A	SNO	
54. Trichlorofluoromethane	U	μg	L 1.	.0 1.0	05/20/22	VI22E20A	05/20/22 17:59	VI22E20A	SNO	
55. 1,2,3-Trichloropropane	U	μg	L 1.	.0 1.0	05/20/22	VI22E20A	05/20/22 17:59	VI22E20A	SNO	
56.1,2,3-Trimethylbenzene	U	μg	L 1.	.0 1.0	05/20/22	VI22E20A	05/20/22 17:59	VI22E20A	SN	
57. 1,2,4-Trimethylbenzene	U	μg	L 1.	.0 1.0	05/20/22	VI22E20A	05/20/22 17:59	VI22E20A	SNO	
58.1,3,5-Trimethylbenzene	U	μg	L 1.	.0 1.0	05/20/22	VI22E20A	05/20/22 17:59	VI22E20A	SNO	
59. Vinyl Chloride	U	μg	L 1.	.0 1.0	05/20/22	VI22E20A	05/20/22 17:59	VI22E20A	SNO	
60. m&p-Xylene	U	μg	L 2	.0 1.0	05/20/22	VI22E20A	05/20/22 17:59	VI22E20A	SNO	
61. o-Xylene	U	μg	L 1.	.0 1.0	05/20/22	VI22E20A	05/20/22 17:59	VI22E20A	SNO	
‡ 62. Xylenes	U	μg	L 3.	.0 1.0	05/20/22	VI22E20A	05/20/22 17:59	VI22E20A	SNO	



Order: A08596 Date:

05/23/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-01-08_95_100 Chain of Custody: 168191

Client Project Name: TRW Milford (30046730) Sample No: Collect Date: 05/19/22

Aliquot ID:

A08596-004

Matrix: Ground Water

Client Project No: 30046730 Sample Matrix: **Ground Water** Collect Time: 11:25

Sample Comments:

Volatile Organic Compounds (VOCs) by GC/MS

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Method: EPA 5030C/EPA 8260D	Description: VAP-01-08_95_100										
						Prepar	ation	Ana	alysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.	
1. Acetone	U		μg/L	50	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC	
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC	
3. Benzene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC	
4. Bromobenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC	
5. Bromochloromethane	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC	
6. Bromodichloromethane	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC	
7. Bromoform	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC	
8. Bromomethane	U	F+	μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC	
		* L+ ICV+									
9.2-Butanone	U		μg/L	25	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC	
10. n-Butylbenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC	
11. sec-Butylbenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC	
12. tert-Butylbenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC	
13. Carbon Disulfide	U		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC	
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC	
15. Chlorobenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC	
16. Chloroethane	U		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC	
17. Chloroform	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC	
18. Chloromethane	U	F+	μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC	
19.2-Chlorotoluene	U		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC	
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC	
21. Dibromochloromethane	U		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC	
22. Dibromomethane	U		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC	
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC	
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC	
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC	
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC	
27.1,1-Dichloroethane	2.3		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC	
28. 1,2-Dichloroethane	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC	
29.1,1-Dichloroethene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC	
30. cis-1,2-Dichloroethene	20		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC	
31. trans-1,2-Dichloroethene	1.4		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC	
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC	
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC	
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC	
35. Ethylbenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC	

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Order: A08596 Date: 05/23/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-01-08_95_100 Chain of Custody: 168191

Client Project Name: TRW Milford (30046730) Sample No: 4 Collect Date: 05/19/22

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 11:25

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS

Aliquot ID: A08596-004 Matrix: Ground Water

Method: EPA 5030C/EPA 8260D

Description: VAP-01-08_95_100

						Prepar	ation	Ana	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
36. Ethylene Dibromide	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC
37.2-Hexanone	U		μg/L	50	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC
38. Isopropylbenzene	U		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC
39. 4-Methyl-2-pentanone	U		μg/L	50	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC
40. Methylene Chloride	U		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC
‡ 41.2-Methylnaphthalene	U	*	μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC
42. MTBE	U		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC
43. Naphthalene	U		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC
44. n-Propylbenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC
45. Styrene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC
46. 1,1,1,2-Tetrachloroethane	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC
47.1,1,2,2-Tetrachloroethane	U	F+	μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC
48. Tetrachloroethene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC
49. Toluene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC
50.1,2,4-Trichlorobenzene	U		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC
51.1,1,1-Trichloroethane	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC
‡ 52.1,1,2-Trichloroethane	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC
53. Trichloroethene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC
54. Trichlorofluoromethane	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC
55. 1,2,3-Trichloropropane	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC
‡ 56.1,2,3-Trimethylbenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC
57.1,2,4-Trimethylbenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC
58.1,3,5-Trimethylbenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC
59. Vinyl Chloride	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC
60. m&p-Xylene	U		μg/L	2.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC
61. o-Xylene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC
‡ 62. Xylenes	U		μg/L	3.0	1.0	05/20/22	VI22E20A	05/20/22 19:44	VI22E20A	SNC



Order: A08596 Date: 05/23/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-01-08_95_100 MS Chain of Custody: 168191

Client Project Name: TRW Milford (30046730) Sample No: 5 Collect Date: 05/19/22

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 11:25

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS	Aliquot ID:	A08596-005	Matrix: Ground Water
Method: EPA 5030C/EPA 8260D	Description:	VAP-01-08_95_100	MS

					-					
						Prepar	ation	Ana	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U		μg/L	50	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNO
2. Acrylonitrile	49		μg/L	2.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNO
3. Benzene	49		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNO
4. Bromobenzene	46		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNO
5. Bromochloromethane	48		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNO
6. Bromodichloromethane	47		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNO
7. Bromoform	48		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNO
8. Bromomethane	47	L+ ICV+	μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNO
9. 2-Butanone	42		μg/L	25	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNO
10. n-Butylbenzene	53		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNO
11. sec-Butylbenzene	50		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNO
12. tert-Butylbenzene	50		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNO
13. Carbon Disulfide	48		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNO
14. Carbon Tetrachloride	48		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNO
15. Chlorobenzene	49		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNO
16. Chloroethane	52		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SN
17. Chloroform	47		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNO
18. Chloromethane	55		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SN
19. 2-Chlorotoluene	47		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SN
20.1,2-Dibromo-3-chloropropane (SIM)	45		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SN
21. Dibromochloromethane	46		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SN
22. Dibromomethane	48		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SN
23. 1,2-Dichlorobenzene	48		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SN
24. 1,3-Dichlorobenzene	49		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SN
25. 1,4-Dichlorobenzene	46		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNO
26. Dichlorodifluoromethane	51		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SN
27.1,1-Dichloroethane	50		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNO
28. 1,2-Dichloroethane	43		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SN
29. 1,1-Dichloroethene	46		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNO
30. cis-1,2-Dichloroethene	65		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SN
31. trans-1,2-Dichloroethene	50		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNO
32.1,2-Dichloropropane	51		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNO
33. cis-1,3-Dichloropropene	47		μg/L	0.50	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SN
34. trans-1,3-Dichloropropene	51		μg/L	0.50	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNO
35. Ethylbenzene	50		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNO
36. Ethylene Dibromide	50		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNO

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Order: A08596 Date: 05/23/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-01-08_95_100 MS Chain of Custody: 168191

Client Project Name: TRW Milford (30046730) Sample No: 5 Collect Date: 05/19/22

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 11:25

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS

Aliquot ID: A08596-005 Matrix: Ground Water

Method: EPA 5030C/EPA 8260D

Description: VAP-01-08_95_100 MS

			D	it Dilution	Preparation		Analysis			
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
37.2-Hexanone	U		μg/L	50	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNC
38. Isopropylbenzene	51		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNC
39. 4-Methyl-2-pentanone	53		μg/L	50	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNC
40. Methylene Chloride	47		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNC
‡ 41.2-Methylnaphthalene	37		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNC
42. MTBE	46		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNC
43. Naphthalene	47		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNC
44. n-Propylbenzene	50		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNC
45. Styrene	46		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNC
46.1,1,1,2-Tetrachloroethane	50		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNC
47.1,1,2,2-Tetrachloroethane	56		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNC
48. Tetrachloroethene	51		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNC
49. Toluene	50		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNC
50.1,2,4-Trichlorobenzene	47		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNC
51.1,1,1-Trichloroethane	48		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNC
‡ 52.1,1,2-Trichloroethane	48		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNC
53. Trichloroethene	45		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNC
54. Trichlorofluoromethane	51		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNC
55. 1,2,3-Trichloropropane	49		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNC
‡ 56.1,2,3-Trimethylbenzene	48		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNC
57.1,2,4-Trimethylbenzene	50		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNC
58. 1,3,5-Trimethylbenzene	50		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNC
59. Vinyl Chloride	55		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNC
60. m&p-Xylene	99		μg/L	2.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNC
61. o-Xylene	50		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNC
‡ 62. Xylenes	150		μg/L	3.0	1.0	05/20/22	VI22E20A	05/20/22 20:10	VI22E20A	SNC



Order: A08596 Date: 05/23/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-01-08_95_100 MSD Chain of Custody: 168191

 Client Project Name:
 TRW Milford (30046730)
 Sample No:
 5
 Collect Date:
 05/19/22

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 11:25

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS

Aliquot ID: A08596-006 Matrix: Ground Water

Method: EPA 5030C/EPA 8260D

Description: VAP-01-08_95_100 MSD

						Prepar	ation	Ana	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U		μg/L	50	1.0	05/20/22	VI22E20A	05/20/22 20:36	VI22E20A	SNC
‡ 2. Acrylonitrile	57		μg/L	2.0	1.0	05/20/22	VI22E20A	05/20/22 20:36	VI22E20A	SNC
3. Benzene	57		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:36	VI22E20A	SNC
4. Bromobenzene	54		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:36	VI22E20A	SNC
5. Bromochloromethane	54		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:36	VI22E20A	SNC
6. Bromodichloromethane	55		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:36	VI22E20A	SNC
7. Bromoform	57		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:36	VI22E20A	SNC
8. Bromomethane	74	L+ ICV+	μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 20:36	VI22E20A	SNC
9. 2-Butanone	49		μg/L	25	1.0	05/20/22	VI22E20A	05/20/22 20:36	VI22E20A	SNC
10. n-Butylbenzene	57		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:36	VI22E20A	SNC
11. sec-Butylbenzene	56		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:36	VI22E20A	SNC
12. tert-Butylbenzene	58		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:36	VI22E20A	SNC
13. Carbon Disulfide	53		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 20:36	VI22E20A	SNC
14. Carbon Tetrachloride	56		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:36	VI22E20A	SNC
15. Chlorobenzene	57		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:36	VI22E20A	SNC
16. Chloroethane	60		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 20:36	VI22E20A	SNC
17. Chloroform	54		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:36	VI22E20A	SNC
18. Chloromethane	64		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 20:36	VI22E20A	SNC
19. 2-Chlorotoluene	55		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 20:36	VI22E20A	SNC
20.1,2-Dibromo-3-chloropropane (SIM)	55		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:36	VI22E20A	SNC
21. Dibromochloromethane	54		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 20:36	VI22E20A	SNC
22. Dibromomethane	55		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 20:36	VI22E20A	SNC
23. 1,2-Dichlorobenzene	56		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:36	VI22E20A	SNC
24. 1,3-Dichlorobenzene	56		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:36	VI22E20A	SNC
25. 1,4-Dichlorobenzene	52		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:36	VI22E20A	SNC
26. Dichlorodifluoromethane	56		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 20:36	VI22E20A	SNC
27.1,1-Dichloroethane	58		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:36	VI22E20A	SNC
28. 1,2-Dichloroethane	49		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:36	VI22E20A	SNC
29. 1,1-Dichloroethene	53		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:36	VI22E20A	SNC
30. cis-1,2-Dichloroethene	72		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:36	VI22E20A	SNC
31. trans-1,2-Dichloroethene	57		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:36	VI22E20A	SNC
32.1,2-Dichloropropane	59		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:36	VI22E20A	SNC
33. cis-1,3-Dichloropropene	55		μg/L	0.50	1.0	05/20/22	VI22E20A	05/20/22 20:36	VI22E20A	SNC
34. trans-1,3-Dichloropropene	58		μg/L	0.50	1.0	05/20/22	VI22E20A	05/20/22 20:36	VI22E20A	SNC
35. Ethylbenzene	58		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:36	VI22E20A	SNC
36. Ethylene Dibromide	58		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 20:36	VI22E20A	SNC

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Order: A08596 Date: 05/23/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-01-08_95_100 MSD Chain of Custody: 168191

Client Project Name: TRW Milford (30046730) Sample No: 5 Collect Date: 05/19/22

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 11:25

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS

Aliquot ID: A08596-006 Matrix: Ground Water

Method: EPA 5030C/EPA 8260D

Description: VAP-01-08_95_100 MSD

Preparation Analysis Parameter(s) Result O Units Reporting Limit Dilution P. Date P. Batch A. Date A. Batch Init. 37.2-Hexanone 52 μg/L 50 1.0 05/20/22 VI22E20A 05/20/22 20:36 VI22E20A SNC 38. Isopropylbenzene 58 μg/L 5.0 1.0 05/20/22 VI22F20A 05/20/22 20:36 VI22E20A SNC 39. 4-Methyl-2-pentanone 60 50 1.0 05/20/22 VI22E20A 05/20/22 20:36 VI22E20A SNC μg/L 40. Methylene Chloride 53 5.0 1.0 05/20/22 VI22F20A 05/20/22 20:36 VI22F20A SNC μg/L ‡ 41.2-Methylnaphthalene 49 5.0 1.0 05/20/22 VI22E20A 05/20/22 20:36 VI22E20A μg/L 42 MTBF 53 μg/L 5.0 1.0 05/20/22 VI22F20A 05/20/22 20:36 VI22E20A SNC 43. Naphthalene 57 5.0 1.0 05/20/22 VI22E20A 05/20/22 20:36 VI22E20A ua/L 44. n-Propylbenzene 05/20/22 VI22F20A 05/20/22 20:36 VI22F20A SNC 57 μg/L 1.0 1.0 45. Styrene 54 1.0 1.0 05/20/22 VI22E20A 05/20/22 20:36 VI22E20A SNC ua/L 46. 1,1,1,2-Tetrachloroethane 58 1.0 1.0 05/20/22 VI22E20A 05/20/22 20:36 VI22E20A SNC μg/L 47. 1,1,2,2-Tetrachloroethane 66 1.0 1.0 05/20/22 VI22E20A 05/20/22 20:36 VI22E20A SNC μg/L 48. Tetrachloroethene 57 1.0 1.0 05/20/22 VI22E20A 05/20/22 20:36 VI22E20A SNC μg/L 49. Toluene 05/20/22 VI22E20A 05/20/22 20:36 VI22E20A SNC 58 μg/L 1.0 1.0 50.1,2,4-Trichlorobenzene 54 5.0 1.0 05/20/22 VI22E20A 05/20/22 20:36 VI22E20A μg/L 1.0 05/20/22 VI22F20A 05/20/22 20:36 VI22F20A SNC 51.1.1.1-Trichloroethane 56 1.0 μg/L 52. 1,1,2-Trichloroethane 05/20/22 VI22E20A 05/20/22 20:36 VI22E20A 57 μg/L 1.0 1.0 SNC 53. Trichloroethene 51 1.0 1.0 05/20/22 VI22F20A 05/20/22 20:36 VI22E20A SNC μg/L 05/20/22 05/20/22 20:36 VI22E20A 54. Trichlorofluoromethane 58 1.0 1.0 VI22E20A ua/L 55. 1,2,3-Trichloropropane 59 1.0 05/20/22 VI22F20A 05/20/22 20:36 VI22E20A SNC μg/L 1.0 ‡ 56.1,2,3-Trimethylbenzene 55 1.0 1.0 05/20/22 VI22F20A 05/20/22 20:36 VI22E20A μg/L 05/20/22 05/20/22 20:36 VI22E20A 57. 1,2,4-Trimethylbenzene 58 μg/L 1.0 1.0 VI22E20A 58. 1,3,5-Trimethylbenzene 57 μg/L 1.0 1.0 05/20/22 VI22E20A 05/20/22 20:36 VI22E20A SNC 59. Vinyl Chloride 64 1.0 1.0 05/20/22 VI22E20A 05/20/22 20:36 VI22E20A SNC μg/L 2.0 1.0 05/20/22 VI22E20A 05/20/22 20:36 VI22E20A SNC 60. m&p-Xylene 110 μg/L 61. o-Xylene 58 1.0 1.0 05/20/22 VI22E20A 05/20/22 20:36 VI22E20A SNC μg/L 170 3.0 05/20/22 VI22F20A 05/20/22 20:36 VI22F20A SNC ‡ 62. Xylenes μg/L 1.0



Order: A08596 Date: 05/23/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Duplicate-1 Chain of Custody: 168191

Client Project Name: TRW Milford (30046730) Sample No: 6 Collect Date: 05/19/22

Aliquot ID:

A08596-007

Matrix: Ground Water

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: NA

Sample Comments:

Volatile Organic Compounds (VOCs) by GC/MS

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Method: EPA 5030C/EPA 8260D				Des	cription:	Duplicate-1				
						Prepar			alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U	V+	μg/L	50	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
3. Benzene	U		μg/L	1.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
4. Bromobenzene	U		μg/L	1.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
5. Bromochloromethane	U		μg/L	1.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
6. Bromodichloromethane	U		μg/L	1.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
7. Bromoform	U		μg/L	1.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
8. Bromomethane	U	L+ ICV+	μg/L	5.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
9. 2-Butanone	U	V+	μg/L	25	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
10. n-Butylbenzene	U	V+	μg/L	1.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
11. sec-Butylbenzene	U		μg/L	1.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
12. tert-Butylbenzene	U		μg/L	1.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
13. Carbon Disulfide	U		μg/L	5.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
15. Chlorobenzene	U		μg/L	1.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
16. Chloroethane	U		μg/L	5.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
17. Chloroform	U		μg/L	1.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
18. Chloromethane	U		μg/L	5.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
19.2-Chlorotoluene	U		μg/L	5.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
21. Dibromochloromethane	U		μg/L	5.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
22. Dibromomethane	U		μg/L	5.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
27.1,1-Dichloroethane	2.4		μg/L	1.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
28. 1,2-Dichloroethane	U		μg/L	1.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
29. 1,1-Dichloroethene	U		μg/L	1.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
30. cis-1,2-Dichloroethene	20		μg/L	1.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
31. trans-1,2-Dichloroethene	1.5		μg/L	1.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
35. Ethylbenzene	U		μg/L	1.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
36. Ethylene Dibromide	U		μg/L	1.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC

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Order: A08596 Date: 05/23/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Duplicate-1 Chain of Custody: 168191

Client Project Name: TRW Milford (30046730) Sample No: 6 Collect Date: 05/19/22

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: NA

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by	GC/MS			Alic	juot ID:	A08596-007	Matrix:	Ground Water		
Method: EPA 5030C/EPA 8260D				Des	cription:	Duplicate-1				
						Prepara	ation	An	alysis	
Parameter(s)	Result	Q U	nits	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
37.2-Hexanone	U	V+ µ	ıg/L	50	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
38. Isopropylbenzene	U	μ	g/L	5.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
39. 4-Methyl-2-pentanone	U	μ	g/L	50	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
40. Methylene Chloride	U	μ	g/L	5.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
‡ 41.2-Methylnaphthalene	U	μ	g/L	5.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
42. MTBE	U	μ	g/L	5.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
43. Naphthalene	U	μ	g/L	5.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
44. n-Propylbenzene	U	μ	g/L	1.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
45. Styrene	U	μ	g/L	1.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
46. 1,1,1,2-Tetrachloroethane	U	μ	g/L	1.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
47.1,1,2,2-Tetrachloroethane	U	μ	g/L	1.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
48. Tetrachloroethene	U	μ	g/L	1.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
49. Toluene	U	μ	g/L	1.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
50. 1,2,4-Trichlorobenzene	U	μ	g/L	5.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
51.1,1,1-Trichloroethane	U	μ	g/L	1.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
‡ 52.1,1,2-Trichloroethane	U	μ	g/L	1.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
53. Trichloroethene	U	μ	g/L	1.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
54. Trichlorofluoromethane	U	μ	g/L	1.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
55. 1,2,3-Trichloropropane	U	μ	g/L	1.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
‡ 56.1,2,3-Trimethylbenzene	U	μ	g/L	1.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
57. 1,2,4-Trimethylbenzene	U	μ	g/L	1.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
58. 1,3,5-Trimethylbenzene	U	μ	g/L	1.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
59. Vinyl Chloride	U	μ	g/L	1.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
60. m&p-Xylene	U	μ	g/L	2.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC
61. o-Xylene	U	μ	g/L	1.0	1.0	05/23/22	VI22E23B	05/23/22 14:53	VI22E23A	SNC

3.0

1.0

05/23/22

μg/L

U

VI22E23B 05/23/22 14:53 VI22E23A SNC

‡ 62. Xylenes



Order: A08596 Date: 05/23/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-01-09_105_110 Chain of Custody: 168191

 Client Project Name:
 TRW Milford (30046730)
 Sample No:
 7
 Collect Date:
 05/19/22

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 14:20

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS	Aliquot ID:	A08596-008	Matrix: Ground Water
Method: EPA 5030C/EPA 8260D	Description:	VAP-01-09_105_110	

						Prepar	ation	Ana	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U		μg/L	50	1.0	05/20/22	VI22E20A	05/20/22 18:25	VI22E20A	SNC
2. Acrylonitrile	U		μg/L	2.0	1.0	05/20/22	VI22E20A	05/20/22 18:25	VI22E20A	SNC
3. Benzene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 18:25	VI22E20A	SNC
4. Bromobenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 18:25	VI22E20A	SNC
5. Bromochloromethane	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 18:25	VI22E20A	SNC
6. Bromodichloromethane	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 18:25	VI22E20A	SNC
7. Bromoform	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 18:25	VI22E20A	SNC
8. Bromomethane	U	L+ ICV+	μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 18:25	VI22E20A	SNC
9. 2-Butanone	U		μg/L	25	1.0	05/20/22	VI22E20A	05/20/22 18:25	VI22E20A	SNC
10. n-Butylbenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 18:25	VI22E20A	SNC
11. sec-Butylbenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 18:25	VI22E20A	SNC
12. tert-Butylbenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 18:25	VI22E20A	SNC
13. Carbon Disulfide	U		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 18:25	VI22E20A	SNC
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 18:25	VI22E20A	SNC
15. Chlorobenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 18:25	VI22E20A	SNC
16. Chloroethane	U		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 18:25	VI22E20A	SNC
17. Chloroform	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 18:25	VI22E20A	SNC
18. Chloromethane	U		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 18:25	VI22E20A	SNC
19. 2-Chlorotoluene	U		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 18:25	VI22E20A	SNC
20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 18:25	VI22E20A	SNC
21. Dibromochloromethane	U		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 18:25	VI22E20A	SNC
22. Dibromomethane	U		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 18:25	VI22E20A	SNC
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 18:25	VI22E20A	SNC
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 18:25	VI22E20A	SNC
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 18:25	VI22E20A	SNC
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	05/20/22	VI22E20A	05/20/22 18:25	VI22E20A	SNC
27.1,1-Dichloroethane	2.5		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 18:25	VI22E20A	SNC
28. 1,2-Dichloroethane	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 18:25	VI22E20A	SNC
29. 1,1-Dichloroethene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 18:25	VI22E20A	SNC
30. cis-1,2-Dichloroethene	18		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 18:25	VI22E20A	SNC
31. trans-1,2-Dichloroethene	1.6		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 18:25	VI22E20A	SNC
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 18:25	VI22E20A	SNC
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	05/20/22	VI22E20A	05/20/22 18:25	VI22E20A	SNC
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	05/20/22	VI22E20A	05/20/22 18:25	VI22E20A	SNC
35. Ethylbenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 18:25	VI22E20A	SNC
36. Ethylene Dibromide	U		μg/L	1.0	1.0	05/20/22	VI22E20A	05/20/22 18:25	VI22E20A	SNC

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Order: A08596 Date: 05/23/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-01-09_105_110 Chain of Custody: 168191

Client Project Name: TRW Milford (30046730) Sample No: 7 Collect Date: 05/19/22

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 14:20

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS

Aliquot ID: A08596-008 Matrix: Ground Water

Method: EPA 5030C/EPA 8260D

Description: VAP-01-09_105_110

Preparation Analysis Parameter(s) Result O Units Reporting Limit Dilution P. Date P. Batch A. Date A. Batch Init. 37.2-Hexanone U μg/L 50 1.0 05/20/22 VI22E20A 05/20/22 18:25 VI22E20A SNC 38. Isopropylbenzene U μg/L 5.0 1.0 05/20/22 VI22E20A 05/20/22 18:25 VI22E20A SNC 39. 4-Methyl-2-pentanone U 50 1.0 05/20/22 VI22E20A 05/20/22 18:25 VI22E20A SNC μg/L U 40. Methylene Chloride 5.0 1.0 05/20/22 VI22F20A 05/20/22 18:25 VI22F20A SNC μg/L ‡ 41.2-Methylnaphthalene U 5.0 1.0 05/20/22 VI22E20A 05/20/22 18:25 VI22E20A μg/L 42 MTBF U μg/L 5.0 1.0 05/20/22 VI22F20A 05/20/22 18:25 VI22E20A SNC 43. Naphthalene U μg/L 5.0 1.0 05/20/22 VI22E20A 05/20/22 18:25 VI22E20A 44. n-Propylbenzene U 05/20/22 VI22F20A 05/20/22 18:25 VI22F20A SNC μg/L 1.0 1.0 U 45. Styrene 1.0 1.0 05/20/22 VI22E20A 05/20/22 18:25 VI22E20A SNC ua/L U 46. 1,1,1,2-Tetrachloroethane 1.0 1.0 05/20/22 VI22E20A 05/20/22 18:25 VI22E20A SNC μg/L 47. 1,1,2,2-Tetrachloroethane U 1.0 1.0 05/20/22 VI22E20A 05/20/22 18:25 VI22E20A SNC μg/L 48. Tetrachloroethene U 1.0 1.0 05/20/22 VI22E20A 05/20/22 18:25 VI22E20A SNC μg/L 49. Toluene 1.5 05/20/22 VI22E20A 05/20/22 18:25 VI22E20A SNC μg/L 1.0 1.0 50.1,2,4-Trichlorobenzene U 5.0 1.0 05/20/22 VI22E20A 05/20/22 18:25 VI22E20A μg/L U 1.0 05/20/22 VI22F20A 05/20/22 18:25 VI22F20A SNC 51.1.1.1-Trichloroethane 1.0 μg/L 52. 1,1,2-Trichloroethane U 05/20/22 VI22E20A 05/20/22 18:25 VI22E20A μg/L 1.0 1.0 SNC 53. Trichloroethene U 1.0 1.0 05/20/22 VI22F20A 05/20/22 18:25 VI22E20A SNC μg/L U 05/20/22 05/20/22 18:25 VI22E20A 54. Trichlorofluoromethane 1.0 1.0 VI22E20A ua/L 05/20/22 18:25 VI22E20A 55. 1,2,3-Trichloropropane U 1.0 05/20/22 VI22F20A SNC μg/L 1.0 ‡ 56.1,2,3-Trimethylbenzene U 1.0 1.0 05/20/22 VI22F20A 05/20/22 18:25 VI22E20A μg/L U 05/20/22 VI22E20A 05/20/22 18:25 VI22E20A 57. 1,2,4-Trimethylbenzene μg/L 1.0 1.0 58. 1,3,5-Trimethylbenzene U μg/L 1.0 1.0 05/20/22 VI22E20A 05/20/22 18:25 VI22E20A SNC 59. Vinyl Chloride U 1.0 1.0 05/20/22 VI22E20A 05/20/22 18:25 VI22E20A SNC μg/L U 2.0 1.0 05/20/22 VI22E20A 05/20/22 18:25 VI22E20A SNC 60. m&p-Xylene μg/L 61. o-Xylene U 1.0 1.0 05/20/22 VI22E20A 05/20/22 18:25 VI22E20A SNC μg/L U 3.0 05/20/22 VI22F20A 05/20/22 18:25 VI22F20A SNC ‡ 62. Xylenes μg/L 1.0



Analytical Laboratory Report Laboratory Project Number: A08596

Order: A08596 Date: 05/23/22

Definitions/ Qualifiers:

- A: Spike recovery or precision unusable due to dilution.
- B: The analyte was detected in the associated method blank.
- E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
- J: The concentration is an estimated value.
- M: Modified Method
- U: The analyte was not detected at or above the reporting limit.
- X: Matrix Interference has resulted in a raised reporting limit or distorted result.
- W: Results reported on a wet-weight basis.
- *: Value reported is outside QC limits

Exception Summary:

: Duplicate analysis not within control limits.

F+ : Recovery from the spiked aliquot exceeds the upper control limit (matrix spike or matrix spike duplicate).

ICV+ : Recovery in the associated initial calibration verification sample exceeds the upper control limit. Results may be biased

high.

L+ : Recovery in the associated laboratory sample (LCS) exceeds the upper control limit. Results may be biased high.
 V+ : Recovery in the associated continuing calibration verification sample (CCV) exceeds the upper control limit. Results

may be biased high.

Analysis Locations:

All analyses performed in Holt.



Accreditation Number(s):

T104704518-19-8 (TX)

lab@fibertec.us



Order ID: A08596 Page: 1 of 9 Date: 05/23/22

VI22E20A: Method Blank (MB)

Run Time: VI22E20A.MB 05/20/2022 11:00 [VI22E20A.MB 05/20A.MB 05/2	A]					
	MB Result	MB	MB RDL			
		Qualifier				
Analyte	μg/L		μg/L			
Acetone	U		50			
Acrylonitrile	U		2.0			
Benzene	U		1.0			
Bromobenzene	U		1.0			
Bromochloromethane	U		1.0			
Bromodichloromethane	U		1.0			
Bromoform	U		1.0			
Bromomethane	U		5.0			
2-Butanone	U		25			
n-Butylbenzene	U		1.0			
sec-Butylbenzene	U		1.0			
tert-Butylbenzene	U		1.0			
Carbon Disulfide	U		5.0			
Carbon Tetrachloride	U		1.0			
Chlorobenzene	U		1.0			
Chloroethane	U		5.0			
Chloroform	U		1.0			
Chloromethane	U		5.0			
2-Chlorotoluene	U		5.0			
1,2-Dibromo-3-chloropropane (SIM)	U		1.0			
Dibromochloromethane	U		5.0			
Dibromomethane	U		5.0			
1,2-Dichlorobenzene	U		1.0			
1,3-Dichlorobenzene	U		1.0			
1,4-Dichlorobenzene	U		1.0			
Dichlorodifluoromethane	U		5.0			
1,1-Dichloroethane	U		1.0			
1,2-Dichloroethane	U		1.0			
1,1-Dichloroethene	U		1.0			
cis-1,2-Dichloroethene	U		1.0			
trans-1,2-Dichloroethene	U		1.0			
1,2-Dichloropropane	U		1.0			
cis-1,3-Dichloropropene	U		0.50			
	1014 Holloway Driv	^	LH+ MI 19910	T: (517) 600,03/15	E (517) 600 (729)	

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Order ID: A08596 Page: 2 of 9 Date: 05/23/22

VI22E20A: Method Blank (MB)

Run Time: VI22E20A.MB 05/20/2022 11:00 [VI22E2	0A]			
	MB Result	MB	MB RDL	
		Qualifier		
Analyte	μg/L		μg/L	
trans-1,3-Dichloropropene	U		0.50	
Ethylbenzene	U		1.0	
Ethylene Dibromide	U		1.0	
2-Hexanone	U		50	
Isopropylbenzene	U		5.0	
4-Methyl-2-pentanone	U		50	
Methylene Chloride	U		5.0	
2-Methylnaphthalene	U		5.0	
MTBE	U		5.0	
Naphthalene	U		5.0	
n-Propylbenzene	U		1.0	
Styrene	U		1.0	
1,1,1,2-Tetrachloroethane	U		1.0	
1,1,2,2-Tetrachloroethane	U		1.0	
Tetrachloroethene	U		1.0	
Toluene	U		1.0	
1,2,4-Trichlorobenzene	U		5.0	
1,1,1-Trichloroethane	U		1.0	
1,1,2-Trichloroethane	U		1.0	
Trichloroethene	U		1.0	
Trichlorofluoromethane	U		1.0	
1,2,3-Trichloropropane	U		1.0	
1,2,3-Trimethylbenzene	U		1.0	
1,2,4-Trimethylbenzene	U		1.0	
1,3,5-Trimethylbenzene	U		1.0	
Vinyl Chloride	U		1.0	
m&p-Xylene	U		2.0	
o-Xylene	U		1.0	
4-Bromofluorobenzene(S)	93		80-120	
Dibromofluoromethane(S)	101		80-120	
1,2-Dichloroethane-d4(S)	92		80-120	
Toluene-d8(S)	98		80-120	

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Order ID: A08596 Page: 3 of 9 Date: 05/23/22

VI22E20A: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VI22E20A.LCS: 05/20/2022 09:42 [VI22E20A] VI22E2	0A.LCSD: 05/20/2	022 10:08 [VI22	E20A]								
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Am	ount			Qualifier	Spike Amou	ınt Result	Rec.	Qualifier			Qualifier
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
Acetone	50.0	32.2	64	54-140		50.0	33.2	66		3	20	
Acrylonitrile	50.0	51.8	104	70-130		50.0	50.6	101		3	20	
Benzene	50.0	49.1	98	80-120		50.0	47.2	94		4	20	
Bromobenzene	50.0	49.1	98	75-125		50.0	47.9	96		2	20	
Bromochloromethane	50.0	48.2	96	70-130		50.0	45.7	91		5	20	
Bromodichloromethane	50.0	47.2	94	75-120		50.0	45.6	91		3	20	
Bromoform	50.0	49.2	98	70-130		50.0	48.7	97		1	20	
Bromomethane	50.0	72.9	146	68-135	*	50.0	67.6	135		8	20	
2-Butanone	50.0	43.5	87	70-148		50.0	44.6	89		2	20	
n-Butylbenzene	50.0	61.8	124	70-133		50.0	59.8	120		3	20	
sec-Butylbenzene	50.0	54.7	109	70-125		50.0	52.8	106		3	20	
tert-Butylbenzene	50.0	53.2	106	70-130		50.0	51.8	104		2	20	
Carbon Disulfide	50.0	48.6	97	70-130		50.0	46.1	92		5	20	
Carbon Tetrachloride	50.0	46.7	93	70-130		50.0	44.6	89		4	20	
Chlorobenzene	50.0	50.6	101	80-120		50.0	48.8	98		3	20	
Chloroethane	50.0	51.3	103	61-130		50.0	48.3	97		6	20	
Chloroform	50.0	46.7	93	80-120		50.0	43.6	87		7	20	
Chloromethane	50.0	55.8	112	67-125		50.0	54.1	108		4	20	
2-Chlorotoluene	50.0	50.8	102	75-125		50.0	49.2	98		4	20	
1,2-Dibromo-3-chloropropane (SIM)	50.0	49.0	98	70-130		50.0	50.5	101		3	20	
Dibromochloromethane	50.0	46.7	93	70-130		50.0	45.3	91		2	20	
Dibromomethane	50.0	49.3	99	75-125		50.0	47.8	96		3	20	
1,2-Dichlorobenzene	50.0	52.2	104	70-120		50.0	51.2	102		2	20	
1,3-Dichlorobenzene	50.0	53.3	107	75-125		50.0	52.0	104		3	20	
1,4-Dichlorobenzene	50.0	50.5	101	75-125		50.0	49.1	98		3	20	
Dichlorodifluoromethane	50.0	50.0	100	70-136		50.0	47.7	95		5	20	
1,1-Dichloroethane	50.0	47.3	95	70-130		50.0	45.5	91		4	20	
1,2-Dichloroethane	50.0	42.4	85	70-130		50.0	41.5	83		2	20	
1,1-Dichloroethene	50.0	44.4	89	78-120		50.0	42.6	85		5	20	
cis-1,2-Dichloroethene	50.0	45.6	91	70-125		50.0	43.9	88		3	20	
trans-1,2-Dichloroethene	50.0	49.0	98	70-130		50.0	47.0	94		4	20	
1,2-Dichloropropane	50.0	51.7	103	80-121		50.0	49.6	99		4	20	
cis-1,3-Dichloropropene	50.0	49.9	100	70-130		50.0	48.4	97		3	20	

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Order ID: A08596 Page: 4 of 9 Date: 05/23/22

VI22E20A: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VI22E20A.LCS: 05/20/2022 09:4	42 [VI22E20A] VI22E20	OA.LCSD: 05/20/20	22 10:08 [VI22I	E20A]								
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Amo	ount			Qualifier	Spike Amo	unt Result	Rec.	Qualifier			Qualifier
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
trans-1,3-Dichloropropene	50.0	53.9	108	70-132		50.0	51.4	103		5	20	
Ethylbenzene	50.0	51.5	103	80-120		50.0	49.8	100		3	20	
Ethylene Dibromide	50.0	51.3	103	80-120		50.0	50.4	101		2	20	
2-Hexanone	50.0	44.7	89	70-130		50.0	45.8	92		3	20	
Isopropylbenzene	50.0	52.5	105	75-125		50.0	51.0	102		3	20	
4-Methyl-2-pentanone	50.0	53.6	107	70-130		50.0	53.9	108		1	20	
Methylene Chloride	50.0	47.2	94	70-130		50.0	45.1	90		4	20	
2-Methylnaphthalene	50.0	51.0	102	70-130		50.0	53.0	106		4	20	
MTBE	50.0	47.0	94	70-125		50.0	45.9	92		2	20	
Naphthalene	50.0	54.0	108	70-130		50.0	55.5	111		3	20	
n-Propylbenzene	50.0	54.7	109	70-130		50.0	52.9	106		3	20	
Styrene	50.0	48.6	97	70-130		50.0	46.2	92		5	20	
1,1,1,2-Tetrachloroethane	50.0	49.9	100	80-130		50.0	48.5	97		3	20	
1,1,2,2-Tetrachloroethane	50.0	58.9	118	70-130		50.0	59.5	119		1	20	
Tetrachloroethene	50.0	52.7	105	70-130		50.0	51.0	102		3	20	
Toluene	50.0	50.7	101	80-120		50.0	48.6	97		4	20	
1,2,4-Trichlorobenzene	50.0	55.6	111	70-130		50.0	55.8	112		1	20	
1,1,1-Trichloroethane	50.0	45.9	92	70-130		50.0	44.7	89		3	20	
1,1,2-Trichloroethane	50.0	49.5	99	75-125		50.0	48.9	98		1	20	
Trichloroethene	50.0	45.3	91	71-125		50.0	43.7	87		4	20	
Trichlorofluoromethane	50.0	48.8	98	70-133		50.0	46.1	92		6	20	
1,2,3-Trichloropropane	50.0	51.2	102	75-125		50.0	52.2	104		2	20	
1,2,3-Trimethylbenzene	50.0	50.8	102	70-130		50.0	49.5	99		3	20	
1,2,4-Trimethylbenzene	50.0	54.7	109	75-130		50.0	53.0	106		3	20	
1,3,5-Trimethylbenzene	50.0	53.6	107	75-130		50.0	52.1	104		3	20	
Vinyl Chloride	50.0	55.0	110	74-125		50.0	52.7	105		5	20	
m&p-Xylene	100	102	102	75-130		100	98.8	99		3	20	
o-Xylene	50.0	51.3	103	80-120		50.0	49.6	99		4	20	
4-Bromofluorobenzene(S)			98	80-120				98				
Dibromofluoromethane(S)			97	80-120				96				
1,2-Dichloroethane-d4(S)			87	80-120				87				
Toluene-d8(S)			99	80-120				99				

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Order ID: A08596 Page: 5 of 9 Date: 05/23/22

VI22E23A: Method Blank (MB)

Run Time: VI22E23A.MB 05/23/2022 14:27 [VI22E23A	\]						
	MB Result	MB	MB RDL				
		Qualifier					
Analyte	μg/L		μg/L				
Acetone	U		50				
Acrylonitrile	U		2.0				
Benzene	U		1.0				
Bromobenzene	U		1.0				
Bromochloromethane	U		1.0				
Bromodichloromethane	U		1.0				
Bromoform	U		1.0				
Bromomethane	U		5.0				
2-Butanone	U		25				
n-Butylbenzene	U		1.0				
sec-Butylbenzene	U		1.0				
tert-Butylbenzene	U		1.0				
Carbon Disulfide	U		5.0				
Carbon Tetrachloride	U		1.0				
Chlorobenzene	U		1.0				
Chloroethane	U		5.0				
Chloroform	U		1.0				
Chloromethane	U		5.0				
2-Chlorotoluene	U		5.0				
1,2-Dibromo-3-chloropropane (SIM)	U		1.0				
Dibromochloromethane	U		5.0				
Dibromomethane	U		5.0				
1,2-Dichlorobenzene	U		1.0				
1,3-Dichlorobenzene	U		1.0				
1,4-Dichlorobenzene	U		1.0				
Dichlorodifluoromethane	U		5.0				
1,1-Dichloroethane	U		1.0				
1,2-Dichloroethane	U		1.0				
1,1-Dichloroethene	U		1.0				
cis-1,2-Dichloroethene	U		1.0				
trans-1,2-Dichloroethene	U		1.0				
1,2-Dichloropropane	U		1.0				
cis-1,3-Dichloropropene	U		0.50				
	014 Holloway Driv		LH+ M/I 19910	T: /517\ 600 02/5	E /517\ 600 0299		

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Order ID: A08596 Page: 6 of 9 Date: 05/23/22

VI22E23A: Method Blank (MB)

Run Time: VI22E23A.MB 05/23/2022 14:27 [VI22E23/	A]		
	MB Result	MB	MB RDL
		Qualifier	
Analyte	μg/L		μg/L
trans-1,3-Dichloropropene	U		0.50
Ethylbenzene	U		1.0
Ethylene Dibromide	U		1.0
2-Hexanone	U		50
Isopropylbenzene	U		5.0
4-Methyl-2-pentanone	U		50
Methylene Chloride	U		5.0
2-Methylnaphthalene	U		5.0
MTBE	U		5.0
Naphthalene	U		5.0
n-Propylbenzene	U		1.0
Styrene	U		1.0
1,1,1,2-Tetrachloroethane	U		1.0
1,1,2,2-Tetrachloroethane	U		1.0
Tetrachloroethene	U		1.0
Toluene	U		1.0
1,2,4-Trichlorobenzene	U		5.0
1,1,1-Trichloroethane	U		1.0
1,1,2-Trichloroethane	U		1.0
Trichloroethene	U		1.0
Trichlorofluoromethane	U		1.0
1,2,3-Trichloropropane	U		1.0
1,2,3-Trimethylbenzene	U		1.0
1,2,4-Trimethylbenzene	U		1.0
1,3,5-Trimethylbenzene	U		1.0
Vinyl Chloride	U		1.0
m&p-Xylene	U		2.0
o-Xylene	U		1.0
4-Bromofluorobenzene(S)	94		80-120
Dibromofluoromethane(S)	101		80-120
1,2-Dichloroethane-d4(S)	90		80-120
Toluene-d8(S)	98		80-120

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Order ID: A08596 Page: 7 of 9 Date: 05/23/22

VI22E23A: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VI22E23A.LCS: 05/23/2022 13:09	[VI22E23A] VI22E2	3A.LCSD: 05/23/20	22 13:35 [VI22I	E23A]								
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Am	ount			Qualifier	Spike Amour	nt Result	Rec.	Qualifier			Qualifier
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
Acetone	50.0	34.5	69	54-140		50.0	33.7	67		3	20	
Acrylonitrile	50.0	53.2	106	70-130		50.0	52.9	106		0	20	
Benzene	50.0	48.9	98	80-120		50.0	47.3	95		3	20	
Bromobenzene	50.0	49.9	100	75-125		50.0	48.0	96		4	20	
Bromochloromethane	50.0	48.7	97	70-130		50.0	47.9	96		1	20	
Bromodichloromethane	50.0	47.0	94	75-120		50.0	45.5	91		3	20	
Bromoform	50.0	50.4	101	70-130		50.0	48.1	96		5	20	
Bromomethane	50.0	71.6	143	68-135	*	50.0	67.8	136	*	5	20	
2-Butanone	50.0	46.3	93	70-148		50.0	45.8	92		1	20	
n-Butylbenzene	50.0	62.1	124	70-133		50.0	57.9	116		7	20	
sec-Butylbenzene	50.0	54.8	110	70-125		50.0	51.2	102		8	20	
tert-Butylbenzene	50.0	53.7	107	70-130		50.0	50.1	100		7	20	
Carbon Disulfide	50.0	48.6	97	70-130		50.0	46.7	93		4	20	
Carbon Tetrachloride	50.0	46.0	92	70-130		50.0	43.7	87		6	20	
Chlorobenzene	50.0	50.7	101	80-120		50.0	48.8	98		3	20	
Chloroethane	50.0	50.1	100	61-130		50.0	48.2	96		4	20	
Chloroform	50.0	46.1	92	80-120		50.0	44.9	90		2	20	
Chloromethane	50.0	56.6	113	67-125		50.0	55.0	110		3	20	
2-Chlorotoluene	50.0	51.5	103	75-125		50.0	48.2	96		7	20	
1,2-Dibromo-3-chloropropane (SIM)	50.0	51.6	103	70-130		50.0	48.8	98		5	20	
Dibromochloromethane	50.0	47.2	94	70-130		50.0	45.7	91		3	20	
Dibromomethane	50.0	49.4	99	75-125		50.0	48.1	96		3	20	
1,2-Dichlorobenzene	50.0	52.6	105	70-120		50.0	49.9	100		5	20	
1,3-Dichlorobenzene	50.0	53.9	108	75-125		50.0	50.8	102		6	20	
1,4-Dichlorobenzene	50.0	50.3	101	75-125		50.0	48.1	96		5	20	
Dichlorodifluoromethane	50.0	48.4	97	70-136		50.0	46.5	93		4	20	
1,1-Dichloroethane	50.0	47.6	95	70-130		50.0	46.3	93		2	20	
1,2-Dichloroethane	50.0	42.4	85	70-130		50.0	41.3	83		2	20	
1,1-Dichloroethene	50.0	44.1	88	78-120		50.0	42.9	86		2	20	
cis-1,2-Dichloroethene	50.0	45.8	92	70-125		50.0	44.9	90		2	20	
trans-1,2-Dichloroethene	50.0	49.1	98	70-130		50.0	47.8	96		2	20	
1,2-Dichloropropane	50.0	51.4	103	80-121		50.0	50.2	100		3	20	
cis-1,3-Dichloropropene	50.0	50.7	101	70-130		50.0	48.9	98		3	20	

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Order ID: A08596 Page: 8 of 9 Date: 05/23/22

VI22E23A: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VI22E23A.LCS: 05/23/2022 13:		3A.LCSD: 05/23/20	=	=								
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Amo	ount			Qualifier	Spike Amou		Rec.	Qualifier			Qualifie
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
trans-1,3-Dichloropropene	50.0	53.9	108	70-132		50.0	52.3	105		3	20	
Ethylbenzene	50.0	51.3	103	80-120		50.0	49.4	99		4	20	
Ethylene Dibromide	50.0	52.8	106	80-120		50.0	51.4	103		3	20	
2-Hexanone	50.0	46.5	93	70-130		50.0	44.8	90		3	20	
sopropylbenzene	50.0	52.3	105	75-125		50.0	50.3	101		4	20	
4-Methyl-2-pentanone	50.0	55.4	111	70-130		50.0	53.4	107		4	20	
Methylene Chloride	50.0	47.3	95	70-130		50.0	46.1	92		3	20	
2-Methylnaphthalene	50.0	55.4	111	70-130		50.0	52.7	105		6	20	
MTBE	50.0	47.7	95	70-125		50.0	47.0	94		1	20	
Naphthalene	50.0	56.8	114	70-130		50.0	53.8	108		5	20	
n-Propylbenzene	50.0	55.0	110	70-130		50.0	51.6	103		7	20	
Styrene	50.0	48.2	96	70-130		50.0	46.6	93		3	20	
1,1,1,2-Tetrachloroethane	50.0	49.5	99	80-130		50.0	48.1	96		3	20	
1,1,2,2-Tetrachloroethane	50.0	61.6	123	70-130		50.0	59.4	119		3	20	
Tetrachloroethene	50.0	52.6	105	70-130		50.0	50.0	100		5	20	
Toluene	50.0	50.5	101	80-120		50.0	48.8	98		3	20	
1,2,4-Trichlorobenzene	50.0	57.7	115	70-130		50.0	54.5	109		5	20	
1,1,1-Trichloroethane	50.0	46.4	93	70-130		50.0	44.7	89		4	20	
1,1,2-Trichloroethane	50.0	50.7	101	75-125		50.0	49.4	99		2	20	
Trichloroethene	50.0	45.4	91	71-125		50.0	43.5	87		4	20	
Trichlorofluoromethane	50.0	47.7	95	70-133		50.0	45.9	92		3	20	
1,2,3-Trichloropropane	50.0	54.2	108	75-125		50.0	51.3	103		5	20	
1,2,3-Trimethylbenzene	50.0	51.6	103	70-130		50.0	48.6	97		6	20	
1,2,4-Trimethylbenzene	50.0	54.9	110	75-130		50.0	51.4	103		7	20	
1,3,5-Trimethylbenzene	50.0	54.1	108	75-130		50.0	50.6	101		7	20	
Vinyl Chloride	50.0	55.4	111	74-125		50.0	53.4	107		4	20	
m&p-Xylene	100	102	102	75-130		100	97.8	98		4	20	
o-Xylene	50.0	51.0	102	80-120		50.0	49.2	98		4	20	
4-Bromofluorobenzene(S)			98	80-120				99				
Dibromofluoromethane(S)			96	80-120				99				
1,2-Dichloroethane-d4(S)			84	80-120				86				
Toluene-d8(S)			99	80-120				100				

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Order ID: A08596 Page: 9 of 9 Date: 05/23/22

Definitions/ Qualifiers:

- U: The analyte was not detected at or above the Reporting Limit (RL).
- *: Value reported is outside QC limits

Exception Summary:

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

Report Generated By:

By Bailey Welch at 5:06 PM, May 23, 2022

Bailey Welch

RSN: VI22E23A-221430523170537



Matrix Spike Report Laboratory Project Number: A08596

Order ID: A08596 Page: 1 of 3 Date: 05/23/22

A08596-004: Original Sample (OS)/Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

EPA 8260D

	Original	MS	MS Result	MS Rec.	Rec. Limits	MS	MSD	MSD	MSD	MSD	RPD	RPD Limits	RPD
	Result	Spike Amo				Qualifier	Spike Amou		Rec.	Qualifier			Qualifie
Analyte	μg/L	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
Acetone	U	50.0	33.3	67	54 - 140		50.0	39.4	79		17	20	
Acrylonitrile	U	50.0	49.2	98	70 - 130		50.0	57.1	114		15	20	
Benzene	U	50.0	49.3	99	80 - 120		50.0	57.2	114		15	20	
Bromobenzene	U	50.0	46.2	92	75 - 125		50.0	53.9	108		15	20	
Bromochloromethane	U	50.0	47.9	96	70 - 130		50.0	54.2	108		12	20	
Bromodichloromethane	U	50.0	47.3	95	75 - 120		50.0	54.5	109		14	20	
Bromoform	U	50.0	48.4	97	70 - 130		50.0	56.7	113		16	20	
Bromomethane	U	50.0	47.4	95	68 - 135		50.0	73.6	147	*	43	20	*
2-Butanone	U	50.0	42.3	85	70 - 148		50.0	48.6	97		14	20	
n-Butylbenzene	U	50.0	52.8	106	70 - 133		50.0	57.3	115		8	20	
sec-Butylbenzene	U	50.0	49.8	100	70 - 125		50.0	56.2	112		12	20	
ert-Butylbenzene	U	50.0	50.2	100	70 - 130		50.0	58.2	116		15	20	
Carbon Disulfide	U	50.0	48.0	96	70 - 130		50.0	53.1	106		10	20	
Carbon Tetrachloride	U	50.0	47.6	95	70 - 130		50.0	55.5	111		15	20	
Chlorobenzene	U	50.0	49.3	99	80 - 120		50.0	56.9	114		14	20	
Chloroethane	U	50.0	52.3	105	61 - 130		50.0	60.4	121		14	20	
Chloroform	U	50.0	46.5	93	80 - 120		50.0	53.7	107		14	20	
Chloromethane	U	50.0	55.5	111	67 - 125		50.0	64.3	129	*	15	20	
2-Chlorotoluene	U	50.0	47.3	95	75 - 125		50.0	55.1	110		15	20	
,2-Dibromo-3-chloropropane (SIM)	U	50.0	45.4	91	70 - 130		50.0	54.8	110		19	20	
Dibromochloromethane	U	50.0	46.2	92	70 - 130		50.0	53.8	108		15	20	
Dibromomethane	U	50.0	47.7	95	75 - 125		50.0	55.4	111		15	20	
,2-Dichlorobenzene	U	50.0	48.0	96	70 - 120		50.0	55.8	112		15	20	
,3-Dichlorobenzene	U	50.0	48.7	97	75 - 125		50.0	55.9	112		14	20	
,4-Dichlorobenzene	U	50.0	46.0	92	75 - 125		50.0	52.4	105		13	20	
Dichlorodifluoromethane	U	50.0	51.4	103	70 - 136		50.0	56.2	112		9	20	
,1-Dichloroethane	2.27	50.0	50.1	96	70 - 130		50.0	58.0	111		15	20	
,2-Dichloroethane	U	50.0	43.1	86	70 - 130		50.0	49.2	98		13	20	
,1-Dichloroethene	U	50.0	45.5	91	78 - 120		50.0	52.7	105		15	20	
sis-1,2-Dichloroethene	19.7	50.0	64.8	90	70 - 125		50.0	72.3	105		15	20	
rans-1,2-Dichloroethene	1.43	50.0	50.0	97	70 - 130		50.0	56.8	111		13	20	
1,2-Dichloropropane	U	50.0	50.9	102	80 - 121		50.0	59.2	118		15	20	
cis-1,3-Dichloropropene	U	50.0	47.5	95	70 - 130		50.0	54.9	110		14	20	

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Matrix Spike Report Laboratory Project Number: A08596

Order ID: A08596 Page: 2 of 3 Date: 05/23/22

A08596-004: Original Sample (OS)/Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

EPA 8260D

Run Time: A08596-004 (OS): 05/2	20/22 19:44 [VI22E2	20A] A08596	-005 (MS): 05/20/2	2 20:10 [VI22E	20A] A08596-0	06 (MSD): 05/	20/22 20:36 [V	(122E20A]					
	Original	MS	MS Result	MS Rec.	Rec. Limits	MS	MSD	MSD	MSD	MSD	RPD	RPD Limits	RPD
	Result	Spike Am	ount			Qualifier	Spike Amo	ount Result	Rec.	Qualifier			Qualifier
Analyte	μg/L	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
trans-1,3-Dichloropropene	U	50.0	50.7	101	70 - 132		50.0	58.2	116		14	20	
Ethylbenzene	U	50.0	50.1	100	80 - 120		50.0	57.7	115		14	20	
Ethylene Dibromide	U	50.0	50.0	100	80 - 120		50.0	58.1	116		15	20	
2-Hexanone	U	50.0	44.2	88	70 - 130		50.0	52.0	104		16	20	
Isopropylbenzene	U	50.0	50.9	102	75 - 125		50.0	58.3	117		14	20	
4-Methyl-2-pentanone	U	50.0	52.9	106	70 - 130		50.0	60.0	120		13	20	
Methylene Chloride	U	50.0	46.8	94	70 - 130		50.0	53.5	107		13	20	
2-Methylnaphthalene	U	50.0	36.6	73	70 - 130		50.0	49.1	98		29	20	*
MTBE	U	50.0	46.0	92	70 - 125		50.0	53.5	107		15	20	
Naphthalene	U	50.0	47.2	94	70 - 130		50.0	56.9	114		19	20	
n-Propylbenzene	U	50.0	50.2	100	70 - 130		50.0	57.3	115		13	20	
Styrene	U	50.0	46.2	92	70 - 130		50.0	53.6	107		15	20	
1,1,1,2-Tetrachloroethane	U	50.0	49.9	100	80 - 130		50.0	58.0	116		15	20	
1,1,2,2-Tetrachloroethane	U	50.0	55.5	111	70 - 130		50.0	65.8	132	*	17	20	
Tetrachloroethene	U	50.0	51.0	102	70 - 130		50.0	57.0	114		11	20	
Toluene	U	50.0	50.4	101	80 - 120		50.0	58.1	116		14	20	
1,2,4-Trichlorobenzene	U	50.0	46.5	93	70 - 130		50.0	53.5	107		14	20	
1,1,1-Trichloroethane	U	50.0	48.2	96	70 - 130		50.0	56.4	113		16	20	
1,1,2-Trichloroethane	U	50.0	48.3	97	75 - 125		50.0	56.6	113		16	20	
Trichloroethene	U	50.0	44.8	90	71 - 125		50.0	51.3	103		14	20	
Trichlorofluoromethane	U	50.0	50.9	102	70 - 133		50.0	58.1	116		13	20	
1,2,3-Trichloropropane	U	50.0	48.9	98	75 - 125		50.0	59.1	118		19	20	
1,2,3-Trimethylbenzene	U	50.0	47.7	95	70 - 130		50.0	55.1	110		14	20	
1,2,4-Trimethylbenzene	U	50.0	50.3	101	75 - 130		50.0	57.7	115		14	20	
1,3,5-Trimethylbenzene	U	50.0	50.0	100	75 - 130		50.0	57.2	114		13	20	
Vinyl Chloride	U	50.0	54.9	110	74 - 125		50.0	63.7	127	*	15	20	
m&p-Xylene	U	100	98.9	99	75 - 130		100	114	114		14	20	
o-Xylene	U	50.0	50.0	100	80 - 120		50.0	57.6	115		14	20	

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Matrix Spike Report Laboratory Project Number: A08596

Order ID: A08596 Page: 3 of 3 Date: 05/23/22

Definitions/ Qualifiers:

- U: The analyte was not detected at or above the Reporting Limit (RL).
- *: Value reported is outside QC limits

Exception Summary:

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

Report Generated By:

By Anthony Donnelly at 6:04 PM, May 23, 2022

RSN: A08596-220523175025



Analytical Laboratory

1914 Holloway Drive Holt, MI 48842 Phone: 517 699 0345

email: lab@fibertec.us

Fax: 517 699 0388

8660 S. Mackinaw Trail Cadillac, Mt 49601 Phone: 231 775 8368

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Industrial Hygiene Services, Inc.

1914 Holloway Drive

Holf, MI 48842 Phone: 517 699 0345

Fax: 517 699 0382

email: asbestos@fibertecihs.com

Geoprobe

11766 E. Grand River Rd.

Brighton, MI 48116 Phone: 810 220 3300 Fax: 810 220 3311 Chain of Custody # **168191**PAGE ___ of ___

Client Name: TR V Milford				P.	'ARAM	ETERS		Matrix Code Delive	rables
Contact Person: Chiratian Se all Project Name/ Number: The Millord 300 96730 Email distribution list: John, Mc land Carradis. com	NER FOR CODE)		000				HOLD SAMPLE	A Air Sw Surface Water Le	vel 2 vel 3 vel <mark>4</mark>
Quote# 844	MATRIX (SEE RIGHT COR	# OF CONTAINERS	85				HOLD		
Purchase Order#	SIX (SE	00	NOC						
Date Time Sample # Client Sample Descriptor	MAT	# OF	2					Remarks:	
5718 1420 1 VAP-01-06-75-80	60	3	V					98-40 TAT	
5128 1745 2 VAP-UI-U7-85-90	GU	3	V					48 ho TBI	
	01	3						48 hv 7 AT	
5719 1125 4 VAP-01-08 95-100	GU		X					48 W TAT	
5/19 1125 5 MS/MSD-1	64		7	-					
5/14 - 6 Duplicate -1	GW	3	X	-				48 ht TAT	
5/19 - 6 Deplicate -1 5/19 142 7 VAP-01-09-105-110	60	3	x					486 TAT	
								Received By Lab	
								Lab	
Comments:								MAY 1 9 2022	
Sampled/Relinguished By:	Date	/ Time	9		Recei	red By:	_	Initials:	
Sampled/Relinguished By:	5/			18:53	14	readis	Fu	ridge	
Relinquished By: HV Cadis fridge	Date/	-	1	18:25	Receiv	ed By:	ui	he.	
Relinquished By: Sa del	Date/	Time		14:25	Receiv	d By Laboratory:	_	1/15/10/20	0
Turnaround Time ALL RESULTS WILL BE SENT BY THE END O	F THE BU	SINES	S DA	Y	0	Mely	-	LABUSE ONLY	1
1 bus. day2 bus. days3 bus. days5-7 bus. days (standard) Other (specify time/date requirement):		_4 b	us, do	ays				iject number: On / Ce e upon receipt at Lab:	0)
									4
Please	e see	ba	ck 1	for terms and	cor	ditions A			
NW D. Strade 5/19/22					-	15 Zall		1600	



Tuesday, May 24, 2022

Fibertec Project Number:

A08623

Project Identification:

TRW Milford (30046730) /30046730

Submittal Date:

05/20/2022

Mr. Christian Seidel Arcadis U.S., Inc. - Novi 28550 Cabot Drive Suite 500 Novi, MI 48377

Dear Mr. Seidel,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

By Sue Ricketts at 10:14 AM, May 24, 2022

For Daryl P. Strandbergh Laboratory Director

Enclosures



Order: A
Date: 0

Matrix: Ground Water

A08623 05/24/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-01-10_115_120 Chain of Custody: 168190

Client Project Name: **TRW Milford (30046730)** Sample No: 1 Collect Date: **05/19/22**

Aliquot ID:

A08623-001

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 17:30

Sample Comments:

Volatile Organic Compounds (VOCs) by GC/MS

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Method: EPA 5030C/EPA 8260D				Des	cription:	VAP-01-10_115_1	11-10_115_120				
						Prepar	ation	An	alysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.	
1. Acetone	U	V+	μg/L	50	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
3. Benzene	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
4. Bromobenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
5. Bromochloromethane	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
6. Bromodichloromethane	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
7. Bromoform	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
8. Bromomethane	U	V+ L+ ICV+	μg/L	5.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
9. 2-Butanone	U	V+	μg/L	25	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
10. n-Butylbenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
11. sec-Butylbenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
12. tert-Butylbenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
13. Carbon Disulfide	U		μg/L	5.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
15. Chlorobenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
16. Chloroethane	U		μg/L	5.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
17. Chloroform	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
18. Chloromethane	U		μg/L	5.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
19. 2-Chlorotoluene	U		μg/L	5.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
21. Dibromochloromethane	U		μg/L	5.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
22. Dibromomethane	U		μg/L	5.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
29. 1,1-Dichloroethene	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
30. cis-1,2-Dichloroethene	14		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
31. trans-1,2-Dichloroethene	1.7		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	05/20/22	VI22E20B				
35. Ethylbenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:21			
36. Ethylene Dibromide	U		μg/L	1.0	1.0	05/20/22		05/21/22 05:21			

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Order: A08623 Date: 05/24/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-01-10_115_120 Chain of Custody: 168190

Client Project Name: **TRW Milford (30046730)** Sample No: **1** Collect Date: **05/19/22**

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 17:30

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/	MS			•	uot ID:	A08623-001					
Method: EPA 5030C/EPA 8260D				Des	cription:	VAP-01-10_115_1	120				
						Prepar			alysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.	
37.2-Hexanone	U		μg/L	50	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
38. Isopropylbenzene	U		μg/L	5.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
39.4-Methyl-2-pentanone	U		μg/L	50	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
40. Methylene Chloride	U		μg/L	5.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
‡ 41.2-Methylnaphthalene	U		μg/L	5.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
42.MTBE	U		μg/L	5.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
43. Naphthalene	U		μg/L	5.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
44. n-Propylbenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
45. Styrene	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
46.1,1,1,2-Tetrachloroethane	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
47.1,1,2,2-Tetrachloroethane	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
48. Tetrachloroethene	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
49. Toluene	1.4		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
50.1,2,4-Trichlorobenzene	U		μg/L	5.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
51.1,1,1-Trichloroethane	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
‡ 52.1,1,2-Trichloroethane	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
53. Trichloroethene	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
54. Trichlorofluoromethane	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
55. 1,2,3-Trichloropropane	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
56. 1,2,3-Trimethylbenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
57.1,2,4-Trimethylbenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
58.1,3,5-Trimethylbenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
59. Vinyl Chloride	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
60. m&p-Xylene	U		μg/L	2.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
61. o-Xylene	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	
‡ 62. Xylenes	U		μg/L	3.0	1.0	05/20/22	VI22E20B	05/21/22 05:21	VI22E20B	SNC	



Order: A08623 Date: 05/24/22

Matrix: Ground Water

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-01-11_125_130 Chain of Custody: 168190

Client Project Name: TRW Milford (30046730) Sample No: 2 Collect Date: 05/20/22

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 10:45

Aliquot ID:

A08623-002

Sample Comments:

Volatile Organic Compounds (VOCs) by GC/MS

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

						7.00020 002				
Method: EPA 5030C/EPA 8260D				Des	cription:	VAP-01-11_125_1	30			
						Prepara	ation	Ana	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U	V+	μg/L	50	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC
3. Benzene	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC
4. Bromobenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC
5. Bromochloromethane	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC
6. Bromodichloromethane	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC
7. Bromoform	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC
8. Bromomethane	U	V+ L+ ICV+	μg/L	5.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC
9.2-Butanone	U	V+	μg/L	25	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC
10. n-Butylbenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC
11. sec-Butylbenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC
12. tert-Butylbenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC
13. Carbon Disulfide	U		μg/L	5.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC
15. Chlorobenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC
16. Chloroethane	U		μg/L	5.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC
17. Chloroform	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC
18. Chloromethane	U		μg/L	5.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC
19.2-Chlorotoluene	U		μg/L	5.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC
21. Dibromochloromethane	U		μg/L	5.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC
22. Dibromomethane	U		μg/L	5.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC
23.1,2-Dichlorobenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC
24.1,3-Dichlorobenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC
25.1,4-Dichlorobenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC
29.1,1-Dichloroethene	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC
30. cis-1,2-Dichloroethene	13		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC
31. trans-1,2-Dichloroethene	2.7		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC
35. Ethylbenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC
36. Ethylene Dibromide	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC

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Order: A08623 05/24/22 Date:

VAP-01-11_125_130 168190 Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Chain of Custody:

Client Project Name: TRW Milford (30046730) 05/20/22 Sample No: 2 Collect Date:

Client Project No: 30046730 Sample Matrix: **Ground Water** Collect Time: 10:45

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable #: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by	platile Organic Compounds (VOCs) by GC/MS			quot ID:	A08623-002	Matrix: Ground Water				
Method: EPA 5030C/EPA 8260D			De	scription:	VAP-01-11_125_	130				
					Prepa	ration	An	alysis		
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.	
37.2-Hexanone	U	μg/L	50	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC	
38. Isopropylbenzene	U	μg/L	5.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC	
39.4-Methyl-2-pentanone	U	μg/L	50	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC	
40. Methylene Chloride	U	μg/L	5.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC	
‡ 41.2-Methylnaphthalene	U	μg/L	5.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC	
42.MTBE	U	μg/L	5.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC	
43. Naphthalene	U	μg/L	5.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC	
44. n-Propylbenzene	U	μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC	
45. Styrene	U	μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC	
46.1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC	
47.1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC	
48. Tetrachloroethene	U	μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC	
49. Toluene	U	μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC	
50.1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC	
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC	
‡ 52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC	
53. Trichloroethene	U	μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC	
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC	
55.1,2,3-Trichloropropane	U	μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC	
‡ 56.1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC	
57.1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC	
58.1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC	
59. Vinyl Chloride	U	μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC	
60. m&p-Xylene	U	μg/L	2.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC	
61. o-Xylene	U	μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC	
‡ 62. Xylenes	U	μg/L	3.0	1.0	05/20/22	VI22E20B	05/21/22 05:47	VI22E20B	SNC	



Order: A08623 Date: 05/24/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-01-12_95_100-2 Chain of Custody: 168190

Client Project Name: TRW Milford (30046730) Sample No: 3 Collect Date: 05/20/22

A08623-003

Aliquot ID:

Matrix: Ground Water

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 13:20

Sample Comments:

Volatile Organic Compounds (VOCs) by GC/MS

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Method: EPA 5030C/EPA 8260D		Description: VAP-01-12_95_100-2											
						Preparation	on	An	alysis				
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.			
1. Acetone	U	V+	μg/L	50	1.0	05/20/22	/I22E20B	05/21/22 06:13	VI22E20B	SNC			
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	05/20/22	/I22E20B	05/21/22 06:13	VI22E20B	SNC			
3. Benzene	U		μg/L	1.0	1.0	05/20/22	/I22E20B	05/21/22 06:13	VI22E20B	SNC			
4. Bromobenzene	U		μg/L	1.0	1.0	05/20/22	/I22E20B	05/21/22 06:13	VI22E20B	SNC			
5. Bromochloromethane	U		μg/L	1.0	1.0	05/20/22	/I22E20B	05/21/22 06:13	VI22E20B	SNC			
6. Bromodichloromethane	U		μg/L	1.0	1.0	05/20/22	/I22E20B	05/21/22 06:13	VI22E20B	SNC			
7. Bromoform	U		μg/L	1.0	1.0	05/20/22	/I22E20B	05/21/22 06:13	VI22E20B	SNC			
8. Bromomethane	U	V+ L+ ICV+	μg/L	5.0	1.0	05/20/22 \	/I22E20B	05/21/22 06:13	VI22E20B	SNC			
9.2-Butanone	U	V+	μg/L	25	1.0	05/20/22	/I22E20B	05/21/22 06:13	VI22E20B	SNC			
10. n-Butylbenzene	U		μg/L	1.0	1.0	05/20/22	/I22E20B	05/21/22 06:13	VI22E20B	SNC			
11. sec-Butylbenzene	U		μg/L	1.0	1.0	05/20/22	/I22E20B	05/21/22 06:13	VI22E20B	SNC			
12. tert-Butylbenzene	U		μg/L	1.0	1.0	05/20/22	/I22E20B	05/21/22 06:13	VI22E20B	SNC			
13. Carbon Disulfide	U		μg/L	5.0	1.0	05/20/22	/I22E20B	05/21/22 06:13	VI22E20B	SNC			
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	05/20/22	/I22E20B	05/21/22 06:13	VI22E20B	SNC			
15. Chlorobenzene	U		μg/L	1.0	1.0	05/20/22	/I22E20B	05/21/22 06:13	VI22E20B	SNC			
16. Chloroethane	U		μg/L	5.0	1.0	05/20/22	/I22E20B	05/21/22 06:13	VI22E20B	SNC			
17. Chloroform	U		μg/L	1.0	1.0	05/20/22	/I22E20B	05/21/22 06:13	VI22E20B	SNC			
18. Chloromethane	U		μg/L	5.0	1.0	05/20/22	/I22E20B	05/21/22 06:13	VI22E20B	SNC			
19.2-Chlorotoluene	U		μg/L	5.0	1.0	05/20/22	/I22E20B	05/21/22 06:13	VI22E20B	SNC			
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	05/20/22	/I22E20B	05/21/22 06:13	VI22E20B	SNC			
21. Dibromochloromethane	U		μg/L	5.0	1.0	05/20/22	/I22E20B	05/21/22 06:13	VI22E20B	SNC			
22. Dibromomethane	U		μg/L	5.0	1.0	05/20/22	/I22E20B	05/21/22 06:13	VI22E20B	SNC			
23.1,2-Dichlorobenzene	U		μg/L	1.0	1.0	05/20/22	/I22E20B	05/21/22 06:13	VI22E20B	SNC			
24.1,3-Dichlorobenzene	U		μg/L	1.0	1.0	05/20/22	/I22E20B	05/21/22 06:13	VI22E20B	SNC			
25.1,4-Dichlorobenzene	U		μg/L	1.0	1.0	05/20/22	/I22E20B	05/21/22 06:13	VI22E20B	SNC			
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	05/20/22	/I22E20B	05/21/22 06:13	VI22E20B	SNC			
27.1,1-Dichloroethane	2.3		μg/L	1.0	1.0	05/20/22	/I22E20B	05/21/22 06:13	VI22E20B	SNC			
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	05/20/22	/I22E20B	05/21/22 06:13	VI22E20B	SNC			
29.1,1-Dichloroethene	U		μg/L	1.0	1.0	05/20/22	/I22E20B	05/21/22 06:13	VI22E20B	SNC			
30. cis-1,2-Dichloroethene	19		μg/L	1.0	1.0	05/20/22	/I22E20B	05/21/22 06:13	VI22E20B	SNC			
31. trans-1,2-Dichloroethene	1.5		μg/L	1.0	1.0	05/20/22	/I22E20B	05/21/22 06:13	VI22E20B	SNC			
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	05/20/22	/I22E20B	05/21/22 06:13	VI22E20B	SNC			
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	05/20/22	/I22E20B	05/21/22 06:13	VI22E20B	SNC			
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	05/20/22	/I22E20B	05/21/22 06:13	VI22E20B	SNC			
35. Ethylbenzene	U		μg/L	1.0	1.0	05/20/22	/I22E20B	05/21/22 06:13	VI22E20B	SNC			
36. Ethylene Dibromide	U		μg/L	1.0	1.0	05/20/22	/I22E20B	05/21/22 06:13	VI22E20B	SNC			

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Order: A08623 Date: 05/24/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-01-12_95_100-2 Chain of Custody: 168190

 Client Project Name:
 TRW Milford (30046730)
 Sample No:
 3
 Collect Date:
 05/20/22

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 13:20

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS

Aliquot ID: A08623-003 Matrix: Ground Water

Method: EPA 5030C/EPA 8260D

Description: VAP-01-12_95_100-2

monioa: 21 /1 00000/21 /1 02002		5550/pion. 7/1 07 12_55_155 2											
					Prepar	ation	Ana	alysis					
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init				
37.2-Hexanone	U	μg/L	50	1.0	05/20/22	VI22E20B	05/21/22 06:13	VI22E20B	SNO				
38. Isopropylbenzene	U	μg/L	5.0	1.0	05/20/22	VI22E20B	05/21/22 06:13	VI22E20B	SNO				
39. 4-Methyl-2-pentanone	U	μg/L	50	1.0	05/20/22	VI22E20B	05/21/22 06:13	VI22E20B	SNO				
40. Methylene Chloride	U	μg/L	5.0	1.0	05/20/22	VI22E20B	05/21/22 06:13	VI22E20B	SN				
41.2-Methylnaphthalene	U	μg/L	5.0	1.0	05/20/22	VI22E20B	05/21/22 06:13	VI22E20B	SNO				
42.MTBE	U	μg/L	5.0	1.0	05/20/22	VI22E20B	05/21/22 06:13	VI22E20B	SN				
43. Naphthalene	U	μg/L	5.0	1.0	05/20/22	VI22E20B	05/21/22 06:13	VI22E20B	SNO				
44. n-Propylbenzene	U	μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:13	VI22E20B	SNO				
45. Styrene	U	μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:13	VI22E20B	SNO				
46.1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:13	VI22E20B	SN				
47.1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:13	VI22E20B	SNO				
48. Tetrachloroethene	U	μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:13	VI22E20B	SN				
49. Toluene	U	μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:13	VI22E20B	SNO				
50.1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	05/20/22	VI22E20B	05/21/22 06:13	VI22E20B	SN				
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:13	VI22E20B	SNO				
52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:13	VI22E20B	SN				
53. Trichloroethene	U	μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:13	VI22E20B	SNO				
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:13	VI22E20B	SNO				
55. 1,2,3-Trichloropropane	U	μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:13	VI22E20B	SNO				
56.1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:13	VI22E20B	SN				
57.1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:13	VI22E20B	SNO				
58.1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:13	VI22E20B	SN				
59. Vinyl Chloride	U	μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:13	VI22E20B	SNO				
60. m&p-Xylene	U	μg/L	2.0	1.0	05/20/22	VI22E20B	05/21/22 06:13	VI22E20B	SNO				
61.o-Xylene	U	μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:13	VI22E20B	SNO				
62. Xylenes	U	μg/L	3.0	1.0	05/20/22	VI22E20B	05/21/22 06:13	VI22E20B	SNO				



Order: Date:

A08623 05/24/22

168190 Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Duplicate 2 Chain of Custody:

Client Project Name: TRW Milford (30046730) Collect Date: 05/20/22 Sample No:

Client Project No: 30046730 Sample Matrix: **Ground Water** Collect Time: NA

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC	/MS	Aliquot ID:				A08623-004	Matrix:	Ground Water		
Method: EPA 5030C/EPA 8260D				Des	cription:	Duplicate 2				
						Prepa	ration	Ana	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U	V+	μg/L	50	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC
3. Benzene	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC
4. Bromobenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC
5. Bromochloromethane	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC
6. Bromodichloromethane	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC
7. Bromoform	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC
8. Bromomethane	U	V+ L+ ICV+	μg/L	5.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC
9.2-Butanone	U	V+	μg/L	25	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC
10. n-Butylbenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC
11. sec-Butylbenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC
12. tert-Butylbenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC
13. Carbon Disulfide	U		μg/L	5.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC
15. Chlorobenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC
16. Chloroethane	U		μg/L	5.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC
17. Chloroform	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC
18. Chloromethane	U		μg/L	5.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC
19.2-Chlorotoluene	U		μg/L	5.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC
21. Dibromochloromethane	U		μg/L	5.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC
22. Dibromomethane	U		μg/L	5.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC
23.1,2-Dichlorobenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC
24.1,3-Dichlorobenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC
25.1,4-Dichlorobenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC
27.1,1-Dichloroethane	2.4		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC
29.1,1-Dichloroethene	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC
30. cis-1,2-Dichloroethene	19		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC
31. trans-1,2-Dichloroethene	1.5		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC
35. Ethylbenzene	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC
36. Ethylene Dibromide	U		μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC
			. 0							

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Order: A08623 05/24/22 Date:

168190 Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Duplicate 2 Chain of Custody:

Client Project Name: TRW Milford (30046730) 05/20/22 Sample No: Collect Date:

Collect Time: Client Project No: 30046730 Sample Matrix: **Ground Water** NA

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable #: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by G	, <u>, , , , , , , , , , , , , , , , , , </u>			Aliquot ID: A08623-004			Matrix: Ground Water				
Method: EPA 5030C/EPA 8260D			Des	cription:	Duplicate 2						
					Prepa	ration	Ana	alysis			
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.		
37.2-Hexanone	U	μg/L	50	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC		
38. Isopropylbenzene	U	μg/L	5.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC		
39.4-Methyl-2-pentanone	U	μg/L	50	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC		
40. Methylene Chloride	U	μg/L	5.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC		
‡ 41.2-Methylnaphthalene	U	μg/L	5.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC		
42. MTBE	U	μg/L	5.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC		
43. Naphthalene	U	μg/L	5.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC		
44. n-Propylbenzene	U	μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC		
45. Styrene	U	μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC		
46.1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC		
47.1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC		
48. Tetrachloroethene	U	μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC		
49. Toluene	U	μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC		
50.1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC		
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC		
‡ 52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC		
53. Trichloroethene	U	μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC		
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC		
55.1,2,3-Trichloropropane	U	μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC		
56. 1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC		
57.1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC		
58.1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC		
59. Vinyl Chloride	U	μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC		
60. m&p-Xylene	U	μg/L	2.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC		
61. o-Xylene	U	μg/L	1.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC		
‡ 62. Xylenes	U	μg/L	3.0	1.0	05/20/22	VI22E20B	05/21/22 06:40	VI22E20B	SNC		



Analytical Laboratory Report Laboratory Project Number: A08623

Order: A08623 Date: 05/24/22

Definitions/ Qualifiers:

- A: Spike recovery or precision unusable due to dilution.
- B: The analyte was detected in the associated method blank.
- E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
- J: The concentration is an estimated value.
- M: Modified Method
- U: The analyte was not detected at or above the reporting limit.
- X: Matrix Interference has resulted in a raised reporting limit or distorted result.
- W: Results reported on a wet-weight basis.
- *: Value reported is outside QC limits

Exception Summary:

ICV+ : Recovery in the associated initial calibration verification sample exceeds the upper control limit. Results may be biased high.

L+ : Recovery in the associated laboratory sample (LCS) exceeds the upper control limit. Results may be biased high.
 V+ : Recovery in the associated continuing calibration verification sample (CCV) exceeds the upper control limit. Results may be biased high.

Analysis Locations:

All analyses performed in Holt.



Accreditation Number(s):

T104704518-19-8 (TX)



Order ID: A08623 Page: 1 of 5 Date: 05/24/22

VI22E20B: Method Blank (MB)

Run Time: VI22E20B.MB 05/20/2022 23:39	[VI22E20B]				
	MB Result MB	MB RDL			
	Qu	alifier			
Analyte	μg/L	μg/L			
Acetone	U	50			
Acrylonitrile	U	2.0			
Benzene	U	1.0			
Bromobenzene	U	1.0			
Bromochloromethane	U	1.0			
Bromodichloromethane	U	1.0			
Bromoform	U	1.0			
Bromomethane	U	5.0			
2-Butanone	U	25			
n-Butylbenzene	U	1.0			
sec-Butylbenzene	U	1.0			
ert-Butylbenzene	U	1.0			
Carbon Disulfide	U	5.0			
Carbon Tetrachloride	U	1.0			
Chlorobenzene	U	1.0			
Chloroethane	U	5.0			
Chloroform	U	1.0			
Chloromethane	U	5.0			
?-Chlorotoluene	U	5.0			
,2-Dibromo-3-chloropropane (SIM)	U	1.0			
Dibromochloromethane	U	5.0			
Dibromomethane	U	5.0			
,2-Dichlorobenzene	U	1.0			
,3-Dichlorobenzene	U	1.0			
,4-Dichlorobenzene	U	1.0			
Dichlorodifluoromethane	U	5.0			
,1-Dichloroethane	U	1.0			
,2-Dichloroethane	U	1.0			
1,1-Dichloroethene	U	1.0			
cis-1,2-Dichloroethene	U	1.0			
rans-1,2-Dichloroethene	U	1.0			
1,2-Dichloropropane	U	1.0			
cis-1,3-Dichloropropene	U	0.50			
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			= ()	= ()	

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8660 S. Mackinaw Trail Cadillac, MI 49601 T: (231) 775-8368 F: (231) 775-8584



Order ID: A08623 Page: 2 of 5 Date: 05/24/22

VI22E20B: Method Blank (MB)

Run Time: VI22E20B.MB 05/20/2022 23:39 [VI22E	E20B]		
	MB Result	MB	MB RDL
		Qualifier	
Analyte	μg/L		μg/L
trans-1,3-Dichloropropene	U		0.50
Ethylbenzene	U		1.0
Ethylene Dibromide	U		1.0
2-Hexanone	U		50
Isopropylbenzene	U		5.0
4-Methyl-2-pentanone	U		50
Methylene Chloride	U		5.0
2-Methylnaphthalene	U		5.0
MTBE	U		5.0
Naphthalene	U		5.0
n-Propylbenzene	U		1.0
Styrene	U		1.0
1,1,1,2-Tetrachloroethane	U		1.0
1,1,2,2-Tetrachloroethane	U		1.0
Tetrachloroethene	U		1.0
Toluene	U		1.0
1,2,4-Trichlorobenzene	U		5.0
1,1,1-Trichloroethane	U		1.0
1,1,2-Trichloroethane	U		1.0
Trichloroethene	U		1.0
Trichlorofluoromethane	U		1.0
1,2,3-Trichloropropane	U		1.0
1,2,3-Trimethylbenzene	U		1.0
1,2,4-Trimethylbenzene	U		1.0
1,3,5-Trimethylbenzene	U		1.0
Vinyl Chloride	U		1.0
m&p-Xylene	U		2.0
o-Xylene	U		1.0
4-Bromofluorobenzene(S)	94		80-120
Dibromofluoromethane(S)	101		80-120
1,2-Dichloroethane-d4(S)	92		80-120
Toluene-d8(S)	98		80-120
. 3.30110 40(0)			00 120

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Order ID: A08623 Page: 3 of 5 Date: 05/24/22

VI22E20B: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VI22E20B.LCS: 05/20/2022 22:21		0B.LCSD: 05/20/20	-	-								
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Am	ount			Qualifier	Spike Amoun		Rec.	Qualifier			Qualifie
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
Acetone	50.0	35.4	71	54-140		50.0	31.7	63		12	20	
Acrylonitrile	50.0	51.4	103	70-130		50.0	46.8	94		9	20	
Benzene	50.0	47.5	95	80-120		50.0	45.0	90		5	20	
Bromobenzene	50.0	49.0	98	75-125		50.0	45.4	91		7	20	
Bromochloromethane	50.0	47.9	96	70-130		50.0	46.0	92		4	20	
Bromodichloromethane	50.0	45.8	92	75-120		50.0	43.4	87		6	20	
Bromoform	50.0	48.1	96	70-130		50.0	45.7	91		5	20	
Bromomethane	50.0	70.1	140	68-135	*	50.0	62.3	125		11	20	
2-Butanone	50.0	44.3	89	70-148		50.0	40.6	81		9	20	
n-Butylbenzene	50.0	56.4	113	70-133		50.0	52.9	106		6	20	
sec-Butylbenzene	50.0	52.0	104	70-125		50.0	48.2	96		8	20	
ert-Butylbenzene	50.0	51.4	103	70-130		50.0	47.5	95		8	20	
Carbon Disulfide	50.0	44.7	89	70-130		50.0	41.7	83		7	20	
Carbon Tetrachloride	50.0	44.5	89	70-130		50.0	41.3	83		7	20	
Chlorobenzene	50.0	48.7	97	80-120		50.0	46.3	93		4	20	
Chloroethane	50.0	49.7	99	61-130		50.0	46.0	92		7	20	
Chloroform	50.0	45.4	91	80-120		50.0	42.6	85		7	20	
Chloromethane	50.0	55.0	110	67-125		50.0	51.4	103		7	20	
2-Chlorotoluene	50.0	49.7	99	75-125		50.0	45.8	92		7	20	
,2-Dibromo-3-chloropropane (SIM)	50.0	49.3	99	70-130		50.0	44.5	89		11	20	
Dibromochloromethane	50.0	46.0	92	70-130		50.0	43.3	87		6	20	
Dibromomethane	50.0	47.8	96	75-125		50.0	45.0	90		6	20	
1,2-Dichlorobenzene	50.0	50.8	102	70-120		50.0	47.4	95		7	20	
1,3-Dichlorobenzene	50.0	51.3	103	75-125		50.0	47.8	96		7	20	
1,4-Dichlorobenzene	50.0	48.8	98	75-125		50.0	45.5	91		7	20	
Dichlorodifluoromethane	50.0	45.9	92	70-136		50.0	43.2	86		7	20	
1,1-Dichloroethane	50.0	47.1	94	70-130		50.0	44.2	88		7	20	
,2-Dichloroethane	50.0	41.2	82	70-130		50.0	39.5	79		4	20	
1,1-Dichloroethene	50.0	43.1	86	78-120		50.0	39.6	79		8	20	
cis-1,2-Dichloroethene	50.0	44.7	89	70-125		50.0	42.2	84		6	20	
rans-1,2-Dichloroethene	50.0	46.6	93	70-130		50.0	44.4	89		4	20	
1,2-Dichloropropane	50.0	50.0	100	80-121		50.0	47.5	95		5	20	
cis-1,3-Dichloropropene	50.0	47.7	95	70-130		50.0	45.3	91		4	20	

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F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584

RSN: VI22E20B-221440524101651



Order ID: A08623 Page: 4 of 5 Date: 05/24/22

VI22E20B: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VI22E20B.LCS: 05/20/2022 22:2	21 [VI22E20B] VI22E2	0B.LCSD: 05/20/20	22 22:47 [VI22	E20B]								
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Am	ount			Qualifier	Spike Amoun	t Result	Rec.	Qualifier			Qualifier
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
trans-1,3-Dichloropropene	50.0	51.0	102	70-132		50.0	48.3	97		5	20	
Ethylbenzene	50.0	49.7	99	80-120		50.0	47.0	94		5	20	
Ethylene Dibromide	50.0	50.7	101	80-120		50.0	47.6	95		6	20	
2-Hexanone	50.0	44.7	89	70-130		50.0	41.7	83		7	20	
Isopropylbenzene	50.0	50.1	100	75-125		50.0	47.5	95		5	20	
4-Methyl-2-pentanone	50.0	53.2	106	70-130		50.0	49.1	98		8	20	
Methylene Chloride	50.0	46.4	93	70-130		50.0	43.8	88		6	20	
2-Methylnaphthalene	50.0	49.7	99	70-130		50.0	44.7	89		11	20	
MTBE	50.0	46.4	93	70-125		50.0	43.8	88		6	20	
Naphthalene	50.0	53.2	106	70-130		50.0	48.9	98		8	20	
n-Propylbenzene	50.0	52.2	104	70-130		50.0	48.7	97		7	20	
Styrene	50.0	46.7	93	70-130		50.0	44.0	88		6	20	
1,1,1,2-Tetrachloroethane	50.0	49.2	98	80-130		50.0	46.3	93		5	20	
,1,2,2-Tetrachloroethane	50.0	59.5	119	70-130		50.0	54.6	109		9	20	
Tetrachloroethene	50.0	49.2	98	70-130		50.0	46.2	92		6	20	
Toluene	50.0	48.6	97	80-120		50.0	46.1	92		5	20	
1,2,4-Trichlorobenzene	50.0	53.0	106	70-130		50.0	48.9	98		8	20	
1,1,1-Trichloroethane	50.0	45.6	91	70-130		50.0	42.7	85		7	20	
,1,2-Trichloroethane	50.0	49.1	98	75-125		50.0	46.3	93		5	20	
Frichloroethene	50.0	43.2	86	71-125		50.0	40.6	81		6	20	
richlorofluoromethane	50.0	46.8	94	70-133		50.0	43.2	86		9	20	
,2,3-Trichloropropane	50.0	50.9	102	75-125		50.0	46.5	93		9	20	
,2,3-Trimethylbenzene	50.0	49.7	99	70-130		50.0	45.8	92		7	20	
,2,4-Trimethylbenzene	50.0	52.4	105	75-130		50.0	48.8	98		7	20	
1,3,5-Trimethylbenzene	50.0	51.4	103	75-130		50.0	48.0	96		7	20	
/inyl Chloride	50.0	52.4	105	74-125		50.0	49.3	99		6	20	
n&p-Xylene	100	98.3	98	75-130		100	93.0	93		5	20	
o-Xylene	50.0	49.3	99	80-120		50.0	46.9	94		5	20	
4-Bromofluorobenzene(S)			97	80-120				98				
Dibromofluoromethane(S)			97	80-120				96				
1,2-Dichloroethane-d4(S)			88	80-120				87				
Toluene-d8(S)			99	80-120				99				

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Order ID: A08623 Page: 5 of 5 Date: 05/24/22

Definitions/ Qualifiers:

- U: The analyte was not detected at or above the Reporting Limit (RL).
- *: Value reported is outside QC limits

Exception Summary:

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

Report Generated By:

By Sue Ricketts at 10:17 AM, May 24, 2022

RSN: VI22E20B-221440524101651



Analytical Laboratory

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Geoprobe

11766 E. Grand River Rd. Brighton, MI 48116

Phone: 810 220 3300 Fax: 810 220 3311 Chain of Custody # 168190

AGE ___ of ___

Client Name: TRW Millad				PARAMETER:	S		Matrix Code	Deliverables
Contact Person: Constian Seichl							S Soil Gw Ground Wo	ater Level 2
Project Name/ Number: The Milford	cope					3	A Air SW Surface Wo	ater Level 3
Email distribution list: John. Malnuisa aveadis. cen	MATRIX (SEE RIGHT CORNER FOR CODE)	VERS	8260			l <u>0</u> _ l	P Wipe X Other: Spe	
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Thursday, June 02, 2022

Fibertec Project Number:

A08693

Project Identification:

TRW Milford (30046730) /30046730

Submittal Date:

05/24/2022

Mr. Christian Seidel Arcadis U.S., Inc. - Novi 28550 Cabot Drive Suite 500 Novi, MI 48377

Dear Mr. Seidel,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

By Sue Ricketts at 11:02 AM, Jun 02, 2022

For Daryl P. Strandbergh Laboratory Director

Enclosures



Order: Date:

Matrix: Ground Water

A08693 06/02/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-02-01_15_20 Chain of Custody: 171066

Client Project Name: TRW Milford (30046730) Sample No: 1 Collect Date: 05/23/22

A08693-001

Aliquot ID:

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 12:35

Sample Comments:

Volatile Organic Compounds (VOCs) by GC/MS

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Method: EPA 5030C/EPA 8260D				Des	cription:	VAP-02-01_15_20			
						Preparation	An	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date P. Batch	A. Date	A. Batch	Init.
1. Acetone	U	V+	μg/L	50	1.0	05/31/22 VI22E31E	06/01/22 01:31	VI22E31B	SNC
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	05/31/22 VI22E31E	06/01/22 01:31	VI22E31B	SNC
3. Benzene	U		μg/L	1.0	1.0	05/31/22 VI22E31E	06/01/22 01:31	VI22E31B	SNC
4. Bromobenzene	U		μg/L	1.0	1.0	05/31/22 VI22E31E	06/01/22 01:31	VI22E31B	SNC
5. Bromochloromethane	U		μg/L	1.0	1.0	05/31/22 VI22E31E	06/01/22 01:31	VI22E31B	SNC
6. Bromodichloromethane	U		μg/L	1.0	1.0	05/31/22 VI22E31E	06/01/22 01:31	VI22E31B	SNC
7. Bromoform	U		μg/L	1.0	1.0	05/31/22 VI22E31E	06/01/22 01:31	VI22E31B	SNC
8. Bromomethane	U	V+ L+ ICV+	μg/L	5.0	1.0	05/31/22 VI22E31E	06/01/22 01:31	VI22E31B	SNC
9.2-Butanone	U	V+	μg/L	25	1.0	05/31/22 VI22E31E	06/01/22 01:31	VI22E31B	SNC
10. n-Butylbenzene	U		μg/L	1.0	1.0	05/31/22 VI22E31E	06/01/22 01:31	VI22E31B	SNC
11. sec-Butylbenzene	U		μg/L	1.0	1.0	05/31/22 VI22E31E	06/01/22 01:31	VI22E31B	SNC
12. tert-Butylbenzene	U		μg/L	1.0	1.0	05/31/22 VI22E31E	06/01/22 01:31	VI22E31B	SNC
13. Carbon Disulfide	U		μg/L	5.0	1.0	05/31/22 VI22E31E	06/01/22 01:31	VI22E31B	SNC
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	05/31/22 VI22E31E	06/01/22 01:31	VI22E31B	SNC
15. Chlorobenzene	U		μg/L	1.0	1.0	05/31/22 VI22E31E	06/01/22 01:31	VI22E31B	SNC
16. Chloroethane	U		μg/L	5.0	1.0	05/31/22 VI22E31E	06/01/22 01:31	VI22E31B	SNC
17. Chloroform	U		μg/L	1.0	1.0	05/31/22 VI22E31E	06/01/22 01:31	VI22E31B	SNC
18. Chloromethane	U		μg/L	5.0	1.0	05/31/22 VI22E31E	06/01/22 01:31	VI22E31B	SNC
19.2-Chlorotoluene	U		μg/L	5.0	1.0	05/31/22 VI22E31E	06/01/22 01:31	VI22E31B	SNC
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	05/31/22 VI22E31E	06/01/22 01:31	VI22E31B	SNC
21. Dibromochloromethane	U		μg/L	5.0	1.0	05/31/22 VI22E31E	06/01/22 01:31	VI22E31B	SNC
22. Dibromomethane	U		μg/L	5.0	1.0	05/31/22 VI22E31E	06/01/22 01:31	VI22E31B	SNC
23.1,2-Dichlorobenzene	U		μg/L	1.0	1.0	05/31/22 VI22E31E	06/01/22 01:31	VI22E31B	SNC
24.1,3-Dichlorobenzene	U		μg/L	1.0	1.0	05/31/22 VI22E31E	06/01/22 01:31	VI22E31B	SNC
25.1,4-Dichlorobenzene	U		μg/L	1.0	1.0	05/31/22 VI22E31E	06/01/22 01:31	VI22E31B	SNC
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	05/31/22 VI22E31E	06/01/22 01:31	VI22E31B	SNC
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	05/31/22 VI22E31E	06/01/22 01:31	VI22E31B	SNC
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	05/31/22 VI22E31E	06/01/22 01:31	VI22E31B	SNC
29.1,1-Dichloroethene	U		μg/L	1.0	1.0	05/31/22 VI22E31E	06/01/22 01:31	VI22E31B	SNC
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	05/31/22 VI22E31E	06/01/22 01:31	VI22E31B	SNC
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	05/31/22 VI22E31E	06/01/22 01:31	VI22E31B	SNC
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	05/31/22 VI22E31E	06/01/22 01:31	VI22E31B	SNC
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	05/31/22 VI22E31E	06/01/22 01:31	VI22E31B	SNC
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	05/31/22 VI22E31E	06/01/22 01:31	VI22E31B	SNC
35. Ethylbenzene	U		μg/L	1.0	1.0	05/31/22 VI22E31E	06/01/22 01:31	VI22E31B	SNC
36. Ethylene Dibromide	U		μg/L	1.0	1.0	05/31/22 VI22E31E	06/01/22 01:31	VI22E31B	SNC

8660 S. Mackinaw Trail

1914 Holloway Drive

11766 E. Grand River

Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order: Date:

A08693 06/02/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-02-01_15_20 Chain of Custody: 171066

Client Project Name: TRW Milford (30046730) 05/23/22 Collect Date: Sample No:

Client Project No: 30046730 Sample Matrix: **Ground Water** Collect Time: 12:35

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

/olatile Organic Compounds (VOCs) by GC/MS			Ali	quot ID:	A08693-001	Matrix:	rix: Ground Water		
Method: EPA 5030C/EPA 8260D			De	scription:	VAP-02-01_15_20	1			
					Prepara	ation	An	alysis	
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
37.2-Hexanone	U	μg/L	50	1.0	05/31/22	VI22E31B	06/01/22 01:31	VI22E31B	SNC
38. Isopropylbenzene	U	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 01:31	VI22E31B	SNC
39.4-Methyl-2-pentanone	U	μg/L	50	1.0	05/31/22	VI22E31B	06/01/22 01:31	VI22E31B	SNC
40. Methylene Chloride	U	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 01:31	VI22E31B	SNC
‡ 41.2-Methylnaphthalene	U	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 01:31	VI22E31B	SNC
42.MTBE	U	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 01:31	VI22E31B	SNC
43. Naphthalene	U	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 01:31	VI22E31B	SNC
44. n-Propylbenzene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 01:31	VI22E31B	SNC
45. Styrene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 01:31	VI22E31B	SNC
46. 1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 01:31	VI22E31B	SNC
47. 1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 01:31	VI22E31B	SNC
48. Tetrachloroethene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 01:31	VI22E31B	SNC
49. Toluene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 01:31	VI22E31B	SNC
50.1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 01:31	VI22E31B	SNC
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 01:31	VI22E31B	SNC
52. 1,1,2-Trichloroethane	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 01:31	VI22E31B	SNC
53. Trichloroethene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 01:31	VI22E31B	SNC
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 01:31	VI22E31B	SNC
55.1,2,3-Trichloropropane	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 01:31	VI22E31B	SNC
56. 1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 01:31	VI22E31B	SNC
57. 1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 01:31	VI22E31B	SNC
58. 1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 01:31	VI22E31B	SNC
59. Vinyl Chloride	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 01:31	VI22E31B	SNC
60. m&p-Xylene	U	μg/L	2.0	1.0	05/31/22	VI22E31B	06/01/22 01:31	VI22E31B	SNC
61. o-Xylene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 01:31	VI22E31B	SNC
‡ 62. Xylenes	U	μg/L	3.0	1.0	05/31/22	VI22E31B	06/01/22 01:31	VI22E31B	SNC



Order: A08693 Date: 06/02/22

Matrix: Ground Water

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-03-01_15_20 Chain of Custody: 171066

Client Project Name: TRW Milford (30046730) Sample No: 2 Collect Date: 05/23/22

A08693-002

Aliquot ID:

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 12:40

Sample Comments:

Volatile Organic Compounds (VOCs) by GC/MS

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Method: EPA 5030C/EPA 8260D				Des	cription:	VAP-03-01_15_20			
						Preparation	An	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date P. Batc	n A. Date	A. Batch	Init.
1. Acetone	U	HV V+	μg/L	50	1.0	05/31/22 VI22E31	B 06/01/22 01:57	VI22E31B	SNC
‡ 2. Acrylonitrile	U	HV	μg/L	2.0	1.0	05/31/22 VI22E31	B 06/01/22 01:57	VI22E31B	SNC
3. Benzene	U	HV	μg/L	1.0	1.0	05/31/22 VI22E31	B 06/01/22 01:57	VI22E31B	SNC
4. Bromobenzene	U	HV	μg/L	1.0	1.0	05/31/22 VI22E31	B 06/01/22 01:57	VI22E31B	SNC
5. Bromochloromethane	U	HV	μg/L	1.0	1.0	05/31/22 VI22E31	B 06/01/22 01:57	VI22E31B	SNC
6. Bromodichloromethane	U	HV	μg/L	1.0	1.0	05/31/22 VI22E31	B 06/01/22 01:57	VI22E31B	SNC
7. Bromoform	U	HV	μg/L	1.0	1.0	05/31/22 VI22E31	B 06/01/22 01:57	VI22E31B	SNC
8. Bromomethane	U	HV V+ L+ ICV+	μg/L	5.0	1.0	05/31/22 VI22E31	B 06/01/22 01:57	VI22E31B	SNC
9. 2-Butanone	U	HV V+	μg/L	25	1.0	05/31/22 VI22E31	B 06/01/22 01:57	VI22E31B	SNC
10. n-Butylbenzene	U	HV	μg/L	1.0	1.0	05/31/22 VI22E31	B 06/01/22 01:57	VI22E31B	SNC
11. sec-Butylbenzene	U	HV	μg/L	1.0	1.0	05/31/22 VI22E31	B 06/01/22 01:57	VI22E31B	SNC
12. tert-Butylbenzene	U	HV	μg/L	1.0	1.0	05/31/22 VI22E31	B 06/01/22 01:57	VI22E31B	SNC
13. Carbon Disulfide	U	HV	μg/L	5.0	1.0	05/31/22 VI22E31	B 06/01/22 01:57	VI22E31B	SNC
14. Carbon Tetrachloride	U	HV	μg/L	1.0	1.0	05/31/22 VI22E31	B 06/01/22 01:57	VI22E31B	SNC
15. Chlorobenzene	U	HV	μg/L	1.0	1.0	05/31/22 VI22E31	B 06/01/22 01:57	VI22E31B	SNC
16. Chloroethane	U	HV	μg/L	5.0	1.0	05/31/22 VI22E31	B 06/01/22 01:57	VI22E31B	SNC
17. Chloroform	U	HV	μg/L	1.0	1.0	05/31/22 VI22E31	B 06/01/22 01:57	VI22E31B	SNC
18. Chloromethane	U	HV	μg/L	5.0	1.0	05/31/22 VI22E31	B 06/01/22 01:57	VI22E31B	SNC
19.2-Chlorotoluene	U	HV	μg/L	5.0	1.0	05/31/22 VI22E31	B 06/01/22 01:57	VI22E31B	SNC
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U	HV	μg/L	1.0	1.0	05/31/22 VI22E31	B 06/01/22 01:57	VI22E31B	SNC
21. Dibromochloromethane	U	HV	μg/L	5.0	1.0	05/31/22 VI22E31	B 06/01/22 01:57	VI22E31B	SNC
22. Dibromomethane	U	HV	μg/L	5.0	1.0	05/31/22 VI22E31	B 06/01/22 01:57	VI22E31B	SNC
23.1,2-Dichlorobenzene	U	HV	μg/L	1.0	1.0	05/31/22 VI22E31	B 06/01/22 01:57	VI22E31B	SNC
24.1,3-Dichlorobenzene	U	HV	μg/L	1.0	1.0	05/31/22 VI22E31	B 06/01/22 01:57	VI22E31B	SNC
25.1,4-Dichlorobenzene	U	HV	μg/L	1.0	1.0	05/31/22 VI22E31	B 06/01/22 01:57	VI22E31B	SNC
26. Dichlorodifluoromethane	U	HV	μg/L	5.0	1.0	05/31/22 VI22E31	B 06/01/22 01:57	VI22E31B	SNC
27.1,1-Dichloroethane	U	HV	μg/L	1.0	1.0	05/31/22 VI22E31	B 06/01/22 01:57	VI22E31B	SNC
28.1,2-Dichloroethane	U	HV	μg/L	1.0	1.0	05/31/22 VI22E31	B 06/01/22 01:57	VI22E31B	SNC
29.1,1-Dichloroethene	U	HV	μg/L	1.0	1.0	05/31/22 VI22E31	B 06/01/22 01:57	VI22E31B	SNC
30. cis-1,2-Dichloroethene	U	HV	μg/L	1.0	1.0	05/31/22 VI22E31	B 06/01/22 01:57	VI22E31B	SNC
31. trans-1,2-Dichloroethene	U	HV	μg/L	1.0	1.0	05/31/22 VI22E31	B 06/01/22 01:57	VI22E31B	SNC
32.1,2-Dichloropropane	U	HV	μg/L	1.0	1.0	05/31/22 VI22E31	B 06/01/22 01:57	VI22E31B	SNC
33. cis-1,3-Dichloropropene	U	HV	μg/L	0.50	1.0	05/31/22 VI22E31	B 06/01/22 01:57	VI22E31B	SNC

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order: A08693 Date: 06/02/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-03-01_15_20 Chain of Custody: 171066

Client Project Name: TRW Milford (30046730) Sample No: 2 Collect Date: 05/23/22

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 12:40

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GO	C/MS			Aliq	uot ID:	A08693-002	Matrix:	Ground Water		
Method: EPA 5030C/EPA 8260D				Des	cription:	VAP-03-01_15_20				
						Prepara	tion	Ana	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
34. trans-1,3-Dichloropropene	U	HV	μg/L	0.50	1.0	05/31/22	VI22E31B	06/01/22 01:57	VI22E31B	SNC
35. Ethylbenzene	U	HV	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 01:57	VI22E31B	SNC
36. Ethylene Dibromide	U	HV	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 01:57	VI22E31B	SNC
37.2-Hexanone	U	HV	μg/L	50	1.0	05/31/22	VI22E31B	06/01/22 01:57	VI22E31B	SNC
38. Isopropylbenzene	U	HV	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 01:57	VI22E31B	SNC
39. 4-Methyl-2-pentanone	U	HV	μg/L	50	1.0	05/31/22	VI22E31B	06/01/22 01:57	VI22E31B	SNC
40. Methylene Chloride	U	HV	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 01:57	VI22E31B	SNC
‡ 41.2-Methylnaphthalene	U	HV	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 01:57	VI22E31B	SNC
42.MTBE	U	HV	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 01:57	VI22E31B	SNC
43. Naphthalene	U	HV	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 01:57	VI22E31B	SNC
44. n-Propylbenzene	U	HV	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 01:57	VI22E31B	SNC
45. Styrene	U	HV	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 01:57	VI22E31B	SNC
46.1,1,1,2-Tetrachloroethane	U	HV	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 01:57	VI22E31B	SNC
47.1,1,2,2-Tetrachloroethane	U	HV	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 01:57	VI22E31B	SNC
48. Tetrachloroethene	U	HV	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 01:57	VI22E31B	SNC
49. Toluene	1.5	HV	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 01:57	VI22E31B	SNC
50.1,2,4-Trichlorobenzene	U	HV	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 01:57	VI22E31B	SNC
51.1,1,1-Trichloroethane	U	HV	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 01:57	VI22E31B	SNC
‡ 52.1,1,2-Trichloroethane	U	HV	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 01:57	VI22E31B	SNC
53. Trichloroethene	U	HV	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 01:57	VI22E31B	SNC
54. Trichlorofluoromethane	U	HV	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 01:57	VI22E31B	SNC
55. 1,2,3-Trichloropropane	U	HV	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 01:57	VI22E31B	SNC
‡ 56.1,2,3-Trimethylbenzene	U	HV	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 01:57	VI22E31B	SNC
57. 1,2,4-Trimethylbenzene	U	HV	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 01:57	VI22E31B	SNC
58. 1,3,5-Trimethylbenzene	U	HV	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 01:57	VI22E31B	SNC
59. Vinyl Chloride	U	HV	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 01:57	VI22E31B	SNC
60. m&p-Xylene	U	HV	μg/L	2.0	1.0	05/31/22	VI22E31B	06/01/22 01:57	VI22E31B	SNC
61.o-Xylene	U	HV	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 01:57	VI22E31B	SNC
‡ 62. Xylenes	U	HV	μg/L	3.0	1.0	05/31/22	VI22E31B	06/01/22 01:57	VI22E31B	SNC

Page:



Order: A0 Date: 06

Matrix: Ground Water

A08693 06/02/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-02-02_25_30 Chain of Custody: 171066

Client Project Name: TRW Milford (30046730) Sample No: 3 Collect Date: 05/23/22

Aliquot ID:

A08693-003

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 14:37

Sample Comments:

Volatile Organic Compounds (VOCs) by GC/MS

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volume Organic Compounds (VCCs) by CC	,			4		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
Method: EPA 5030C/EPA 8260D				Des	cription:	VAP-02-02_25_30				
						Prepara	ition	Ana	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U	V+	μg/L	50	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
3. Benzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
4. Bromobenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
5. Bromochloromethane	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
6. Bromodichloromethane	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
7. Bromoform	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
8. Bromomethane	U	V+ L+ ICV+	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
9.2-Butanone	U	V+	μg/L	25	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
10. n-Butylbenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
11. sec-Butylbenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
12. tert-Butylbenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
13. Carbon Disulfide	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
15. Chlorobenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
16. Chloroethane	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
17. Chloroform	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
18. Chloromethane	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
19.2-Chlorotoluene	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
21. Dibromochloromethane	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
22. Dibromomethane	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
23.1,2-Dichlorobenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
24.1,3-Dichlorobenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
25.1,4-Dichlorobenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
29.1,1-Dichloroethene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
35. Ethylbenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
36. Ethylene Dibromide	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order: A0

A08693 06/02/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-02-02_25_30 Chain of Custody: 171066

Client Project Name: **TRW Milford (30046730)** Sample No: **3** Collect Date: **05/23/22**

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 14:37

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC Method: EPA 5030C/EPA 8260D		quot ID:	A08693-003 Matrix VAP-02-02_25_30		Ground Water				
					Prepara		An	alysis	
Parameter(s)	Result	Q Units	Reporting Limit	Dilution		P. Batch	A. Date	A. Batch	Init.
37.2-Hexanone	U	μg/L	50	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
38. Isopropylbenzene	U	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
39.4-Methyl-2-pentanone	U	μg/L	50	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
40. Methylene Chloride	U	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
‡ 41.2-Methylnaphthalene	U	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
42. MTBE	U	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
43. Naphthalene	U	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
44. n-Propylbenzene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
45. Styrene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
46. 1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
47.1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
48. Tetrachloroethene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
49. Toluene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
50.1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
‡ 52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
53. Trichloroethene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
55. 1,2,3-Trichloropropane	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
‡ 56.1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
57.1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
58.1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
59. Vinyl Chloride	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
60. m&p-Xylene	U	μg/L	2.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
61. o-Xylene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC
‡ 62. Xylenes	U	μg/L	3.0	1.0	05/31/22	VI22E31B	06/01/22 02:23	VI22E31B	SNC



Order: A
Date: 0

Matrix: Ground Water

A08693 06/02/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-03-02_25_30 Chain of Custody: 171066

Client Project Name: TRW Milford (30046730) Sample No: 4 Collect Date: 05/23/22

Aliquot ID:

A08693-004

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 15:20

Sample Comments:

Volatile Organic Compounds (VOCs) by GC/MS

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Method: EPA 5030C/EPA 8260D	Description: VAP-03-02_25_30											
						Prepara	ation	Ana	alysis			
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.		
1. Acetone	U	V+	μg/L	50	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC		
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC		
3. Benzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC		
4. Bromobenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC		
5. Bromochloromethane	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC		
6. Bromodichloromethane	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC		
7. Bromoform	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC		
8. Bromomethane	U	V+ L+ ICV+	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC		
9.2-Butanone	U	V+	μg/L	25	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC		
10. n-Butylbenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC		
11. sec-Butylbenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC		
12. tert-Butylbenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC		
13. Carbon Disulfide	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC		
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC		
15. Chlorobenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC		
16. Chloroethane	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC		
17. Chloroform	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC		
18. Chloromethane	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC		
19.2-Chlorotoluene	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC		
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC		
21. Dibromochloromethane	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC		
22. Dibromomethane	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC		
23.1,2-Dichlorobenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC		
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC		
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC		
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC		
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC		
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC		
29.1,1-Dichloroethene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC		
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC		
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC		
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC		
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC		
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC		
35. Ethylbenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC		
36. Ethylene Dibromide	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC		

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Order: A08693 Date: 06/02/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-03-02_25_30 Chain of Custody: 171066

 Client Project Name:
 TRW Milford (30046730)
 Sample No:
 4
 Collect Date:
 05/23/22

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 15:20

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/	MS			Aliq	uot ID:	A08693-004	Matrix:	Ground Water		
Method: EPA 5030C/EPA 8260D				Des	cription:	VAP-03-02_25_30				
						Prepara	tion	An	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
37.2-Hexanone	U		μg/L	50	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC
38. Isopropylbenzene	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC
39. 4-Methyl-2-pentanone	U		μg/L	50	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC
40. Methylene Chloride	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC
‡ 41.2-Methylnaphthalene	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC
42. MTBE	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC
43. Naphthalene	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC
44. n-Propylbenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC
45. Styrene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC
46. 1,1,1,2-Tetrachloroethane	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC
47.1,1,2,2-Tetrachloroethane	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC
48. Tetrachloroethene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC
49. Toluene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC
50. 1,2,4-Trichlorobenzene	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC
51.1,1,1-Trichloroethane	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC
‡ 52.1,1,2-Trichloroethane	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC
53. Trichloroethene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC
54. Trichlorofluoromethane	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC
55. 1,2,3-Trichloropropane	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC
‡ 56.1,2,3-Trimethylbenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC
57. 1,2,4-Trimethylbenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC
58.1,3,5-Trimethylbenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC
59. Vinyl Chloride	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC
60. m&p-Xylene	U		μg/L	2.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC
61. o-Xylene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 02:49	VI22E31B	SNC

3.0

1.0

05/31/22

μg/L

VI22E31B 06/01/22 02:49 VI22E31B SNC

‡ 62. Xylenes



Order: A
Date: 0

Matrix: Ground Water

A08693 06/02/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-02-03_35_40 Chain of Custody: 171066

Client Project Name: TRW Milford (30046730) Sample No: 5 Collect Date: 05/23/22

Aliquot ID:

A08693-005

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 16:35

Sample Comments:

Volatile Organic Compounds (VOCs) by GC/MS

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Method: EPA 5030C/EPA 8260D				Des	cription:	VAP-02-03_35_40)			
						Prepar	ation	An	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U	V+	μg/L	50	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
3. Benzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
4. Bromobenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
5. Bromochloromethane	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
6. Bromodichloromethane	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
7. Bromoform	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
8. Bromomethane	U	V+ L+ ICV+	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
9.2-Butanone	U	V+	μg/L	25	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
10. n-Butylbenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
11. sec-Butylbenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
12. tert-Butylbenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
13. Carbon Disulfide	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
15. Chlorobenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
16. Chloroethane	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
17. Chloroform	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
18. Chloromethane	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
19. 2-Chlorotoluene	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
21. Dibromochloromethane	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
22. Dibromomethane	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
29.1,1-Dichloroethene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
35. Ethylbenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
36. Ethylene Dibromide	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order: A08693 06/02/22 Date:

VAP-02-03_35_40 171066 Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Chain of Custody:

Client Project Name: TRW Milford (30046730) 05/23/22 Sample No: 5 Collect Date:

Client Project No: 30046730 Sample Matrix: **Ground Water** Collect Time: 16:35

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable #: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Method: EPA 5030C/EPA 8260D				iquot ID:	A08693-005		Ground Water		
Method: EPA 5030C/EPA 8260D			De	escription:	VAP-02-03_35_40				
					Prepara	ation		alysis	
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
37.2-Hexanone	U	μg/L	. 50	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
38. Isopropylbenzene	U	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
39.4-Methyl-2-pentanone	U	μg/L	. 50	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
40. Methylene Chloride	U	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
‡ 41.2-Methylnaphthalene	U	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
42. MTBE	U	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
43. Naphthalene	U	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
44. n-Propylbenzene	U	μg/L	. 1.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
45. Styrene	U	μg/L	. 1.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
46.1,1,1,2-Tetrachloroethane	U	μg/L	. 1.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
47.1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
48. Tetrachloroethene	U	μg/L	. 1.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
49. Toluene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
50.1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
‡ 52.1,1,2-Trichloroethane	U	μg/L	. 1.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
53. Trichloroethene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
54. Trichlorofluoromethane	U	μg/L	. 1.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
55.1,2,3-Trichloropropane	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
56. 1,2,3-Trimethylbenzene	U	μg/L	. 1.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
57. 1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
58. 1,3,5-Trimethylbenzene	U	μg/L	. 1.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
59. Vinyl Chloride	U	μg/L	. 1.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
60. m&p-Xylene	U	μg/L	2.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
61. o-Xylene	U	μg/L	. 1.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC
‡ 62. Xylenes	U	μg/L	3.0	1.0	05/31/22	VI22E31B	06/01/22 03:15	VI22E31B	SNC



Order: Date:

Matrix: Ground Water

A08693 06/02/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-03-03_35_40 Chain of Custody: 171066

 Client Project Name:
 TRW Milford (30046730)
 Sample No:
 7
 Collect Date:
 05/24/22

Aliquot ID:

A08693-007

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 09:15

Sample Comments:

Volatile Organic Compounds (VOCs) by GC/MS

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Method: EPA 5030C/EPA 8260D				Des	cription:	VAP-03-03_35_40)			
						Prepar	ation	An	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U	V+	μg/L	50	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
3. Benzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
4. Bromobenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
5. Bromochloromethane	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
6. Bromodichloromethane	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
7. Bromoform	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
8. Bromomethane	U	V+ L+ ICV+	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
9.2-Butanone	U	V+	μg/L	25	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
10. n-Butylbenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
11. sec-Butylbenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
12. tert-Butylbenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
13. Carbon Disulfide	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
15. Chlorobenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
16. Chloroethane	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
17. Chloroform	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
18. Chloromethane	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
19. 2-Chlorotoluene	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
21. Dibromochloromethane	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
22. Dibromomethane	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
25.1,4-Dichlorobenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
29.1,1-Dichloroethene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
35. Ethylbenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
36. Ethylene Dibromide	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC

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Order: A08693 Date:

06/02/22

VAP-03-03_35_40 Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Chain of Custody: 171066

Client Project Name: TRW Milford (30046730) 05/24/22 Collect Date: Sample No:

Client Project No: 30046730 Sample Matrix: **Ground Water** Collect Time: 09:15

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

olatile Organic Compounds (VOCs) by GC/MS Method: EPA 5030C/EPA 8260D				quot ID:	A08693-007 Matrix n: VAP-03-03_35_40		Ground Water		
				oonparen.	Prepara		Δn	alysis	
Parameter(s)	Result	Q Units	Reporting Limit	Dilution		P. Batch	A. Date	A. Batch	Init.
37.2-Hexanone	U	μg/L	50	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
38. Isopropylbenzene	U	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
39.4-Methyl-2-pentanone	U	μg/L	50	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
40. Methylene Chloride	U	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
‡ 41.2-Methylnaphthalene	U	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
42.MTBE	U	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
43. Naphthalene	U	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
44. n-Propylbenzene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
45. Styrene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
46. 1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
47.1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
48. Tetrachloroethene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
49. Toluene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
50.1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
‡ 52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
53. Trichloroethene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
55. 1,2,3-Trichloropropane	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
‡ 56.1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
57.1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
58.1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
59. Vinyl Chloride	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
60. m&p-Xylene	U	μg/L	2.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
61. o-Xylene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC
‡ 62. Xylenes	U	μg/L	3.0	1.0	05/31/22	VI22E31B	06/01/22 03:41	VI22E31B	SNC



Order:

Matrix: Ground Water

A08693 06/02/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-02-04_45_50 Chain of Custody: 171066

Client Project Name: TRW Milford (30046730) Sample No: 8 Collect Date: 05/24/22

Aliquot ID:

A08693-008

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 09:20

Sample Comments:

Volatile Organic Compounds (VOCs) by GC/MS

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Method: EPA 5030C/EPA 8260D				Des	cription:	VAP-02-04_45_50)			
						Prepar	ation	An	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U	V+	μg/L	50	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
3. Benzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
4. Bromobenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
5. Bromochloromethane	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
6. Bromodichloromethane	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
7. Bromoform	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
8. Bromomethane	U	V+ L+ ICV+	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
9. 2-Butanone	U	V+	μg/L	25	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
10. n-Butylbenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
11. sec-Butylbenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
12. tert-Butylbenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
13. Carbon Disulfide	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
15. Chlorobenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
16. Chloroethane	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
17. Chloroform	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
18. Chloromethane	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
19. 2-Chlorotoluene	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
21. Dibromochloromethane	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
22. Dibromomethane	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
25.1,4-Dichlorobenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
29.1,1-Dichloroethene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
30. cis-1,2-Dichloroethene	1.5		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
35. Ethylbenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
36. Ethylene Dibromide	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order: A08693 Date: 06/02/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-02-04_45_50 Chain of Custody: 171066

Client Project Name: TRW Milford (30046730) Sample No: 8 Collect Date: 05/24/22

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 09:20

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

olatile Organic Compounds (VOCs) by GC/MS lethod: EPA 5030C/EPA 8260D			'		A08693-008	Matrix:	Ground Water			
Method: EPA 5030C/EPA 8260D				Des	cription:	VAP-02-04_45_50				
						Prepara	ion	Ana	alysis	
Parameter(s)	Result	Q U	nits	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
37.2-Hexanone	U	μ	g/L	50	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
38. Isopropylbenzene	U	μ	g/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
39.4-Methyl-2-pentanone	U	μ	g/L	50	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
40. Methylene Chloride	U	μ	g/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
‡ 41.2-Methylnaphthalene	U	μ	g/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
42.MTBE	U	μ	g/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
43. Naphthalene	U	μ	g/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
44. n-Propylbenzene	U	μ	g/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
45. Styrene	U	μ	g/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
46.1,1,1,2-Tetrachloroethane	U	μ	g/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
47.1,1,2,2-Tetrachloroethane	U	μ	g/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
48. Tetrachloroethene	U	μ	g/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
49. Toluene	U	μ	g/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
50.1,2,4-Trichlorobenzene	U	μ	g/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
51.1,1,1-Trichloroethane	U	μ	g/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
‡ 52.1,1,2-Trichloroethane	U	μ	g/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
53. Trichloroethene	U	μ	g/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
54. Trichlorofluoromethane	U	μ	g/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
55. 1,2,3-Trichloropropane	U	μ	g/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
\$ 56.1,2,3-Trimethylbenzene	U	μ	g/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
57.1,2,4-Trimethylbenzene	U	μ	g/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
58.1,3,5-Trimethylbenzene	U	μ	g/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
59. Vinyl Chloride	U	μ	g/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
60. m&p-Xylene	U	μ	g/L	2.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
61.o-Xylene	U	μ	g/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC
‡ 62. Xylenes	U	μ	g/L	3.0	1.0	05/31/22	VI22E31B	06/01/22 04:07	VI22E31B	SNC



Order: /

Matrix: Ground Water

A08693 06/02/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-02-05_55_60 Chain of Custody: 171066

Client Project Name: TRW Milford (30046730) Sample No: 9 Collect Date: 05/24/22

Aliquot ID:

A08693-009

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 11:05

Sample Comments:

Volatile Organic Compounds (VOCs) by GC/MS

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Method: EPA 5030C/EPA 8260D	Description: VAP-02-05_55_60											
						Preparat	ion	Ana	alysis			
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.		
1. Acetone	U	V+	μg/L	50	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC		
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC		
3. Benzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC		
4. Bromobenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC		
5. Bromochloromethane	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC		
6. Bromodichloromethane	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC		
7. Bromoform	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC		
8. Bromomethane	U	V+ L+ ICV+	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC		
9.2-Butanone	U	V+	μg/L	25	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC		
10. n-Butylbenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC		
11. sec-Butylbenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC		
12. tert-Butylbenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC		
13. Carbon Disulfide	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC		
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC		
15. Chlorobenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC		
16. Chloroethane	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC		
17. Chloroform	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC		
18. Chloromethane	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC		
19.2-Chlorotoluene	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC		
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC		
21. Dibromochloromethane	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC		
22. Dibromomethane	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC		
23.1,2-Dichlorobenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC		
24.1,3-Dichlorobenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC		
25.1,4-Dichlorobenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC		
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC		
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC		
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC		
29.1,1-Dichloroethene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC		
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC		
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC		
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC		
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC		
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC		
35. Ethylbenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC		
36. Ethylene Dibromide	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC		

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Order: A08693 06/02/22 Date:

VAP-02-05_55_60 171066 Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Chain of Custody:

Client Project Name: TRW Milford (30046730) 05/24/22 Sample No: 9 Collect Date:

Client Project No: 30046730 Sample Matrix: **Ground Water** Collect Time: 11:05

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable #: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by G	C/MS		Ali	quot ID:	A08693-009	Matrix:	Ground Water		
Method: EPA 5030C/EPA 8260D			De	scription:	VAP-02-05_55_60				
					Prepara	ation	Ana	alysis	
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
37.2-Hexanone	U	μg/L	50	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC
38. Isopropylbenzene	U	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC
39.4-Methyl-2-pentanone	U	μg/L	50	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC
40. Methylene Chloride	U	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC
‡ 41.2-Methylnaphthalene	U	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC
42. MTBE	U	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC
43. Naphthalene	U	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC
44. n-Propylbenzene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC
45. Styrene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC
46.1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC
47.1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC
48. Tetrachloroethene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC
49. Toluene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC
50.1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC
‡ 52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC
53. Trichloroethene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC
55.1,2,3-Trichloropropane	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC
‡ 56.1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC
57.1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC
58.1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC
59. Vinyl Chloride	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC
60. m&p-Xylene	U	μg/L	2.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC
61. o-Xylene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC
‡ 62. Xylenes	U	μg/L	3.0	1.0	05/31/22	VI22E31B	06/01/22 04:33	VI22E31B	SNC



Order: A08693 Date: 06/02/22

Matrix: Ground Water

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-03-04_45_50 Chain of Custody: 171066

Client Project Name: **TRW Milford (30046730)** Sample No: **10** Collect Date: **05/24/22**

Aliquot ID:

A08693-010

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 10:45

Sample Comments:

Volatile Organic Compounds (VOCs) by GC/MS

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Method: EPA 5030C/EPA 8260D										
						Prepar	ation	Ana	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U	V+	μg/L	50	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
3. Benzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
4. Bromobenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
5. Bromochloromethane	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
6. Bromodichloromethane	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
7. Bromoform	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
8. Bromomethane	U	V+ L+ ICV+	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
9.2-Butanone	U	V+	μg/L	25	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
10. n-Butylbenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
11. sec-Butylbenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
12. tert-Butylbenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
13. Carbon Disulfide	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
15. Chlorobenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
16. Chloroethane	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
17. Chloroform	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
18. Chloromethane	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
19.2-Chlorotoluene	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
21. Dibromochloromethane	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
22. Dibromomethane	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
29.1,1-Dichloroethene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
35. Ethylbenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
36. Ethylene Dibromide	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order: A08693 Date: 06/02/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-03-04_45_50 Chain of Custody: 171066

Client Project Name: **TRW Milford (30046730)** Sample No: **10** Collect Date: **05/24/22**

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 10:45

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by	GC/MS		Ali	quot ID:	A08693-010	Matrix:	Ground Water		
Method: EPA 5030C/EPA 8260D			De	scription:	VAP-03-04_45_50)			
					Prepara	ation	An	alysis	
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
37.2-Hexanone	U	μg/L	50	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
38. Isopropylbenzene	U	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
39.4-Methyl-2-pentanone	U	μg/L	50	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
40. Methylene Chloride	U	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
‡ 41.2-Methylnaphthalene	U	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
42. MTBE	U	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
43. Naphthalene	U	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
44. n-Propylbenzene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
45. Styrene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
46. 1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
47.1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
48. Tetrachloroethene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
49. Toluene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
50. 1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
‡ 52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
53. Trichloroethene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
55. 1,2,3-Trichloropropane	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
‡ 56.1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
57. 1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
58. 1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
59. Vinyl Chloride	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
60. m&p-Xylene	U	μg/L	2.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
61.o-Xylene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC
‡ 62. Xylenes	U	μg/L	3.0	1.0	05/31/22	VI22E31B	06/01/22 05:00	VI22E31B	SNC



Order: Date:

Matrix: Ground Water

A08693 06/02/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-03-05_55_60 Chain of Custody: 171064

Client Project Name: **TRW Milford (30046730)** Sample No: **11** Collect Date: **05/24/22**

Aliquot ID:

A08693-011

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 12:05

Sample Comments:

Volatile Organic Compounds (VOCs) by GC/MS

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Method: EPA 5030C/EPA 8260D				Des	cription:	VAP-03-05_55_60)			
						Prepar	ation	An	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U	V+	μg/L	50	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
3. Benzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
4. Bromobenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
5. Bromochloromethane	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
6. Bromodichloromethane	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
7. Bromoform	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
8. Bromomethane	U	V+ L+ ICV+	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
9. 2-Butanone	U	V+	μg/L	25	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
10. n-Butylbenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
11. sec-Butylbenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
12. tert-Butylbenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
13. Carbon Disulfide	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
15. Chlorobenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
16. Chloroethane	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
17. Chloroform	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
18. Chloromethane	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
19. 2-Chlorotoluene	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
21. Dibromochloromethane	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
22. Dibromomethane	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
25.1,4-Dichlorobenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
29.1,1-Dichloroethene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
35. Ethylbenzene	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
36. Ethylene Dibromide	U		μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC

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Order: Date:

A08693 06/02/22

VAP-03-05_55_60 171064 Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Chain of Custody:

Client Project Name: TRW Milford (30046730) 05/24/22 Sample No: Collect Date: 11

Client Project No: 30046730 Sample Matrix: **Ground Water** Collect Time: 12:05

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable #: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by	GC/MS		Ali	quot ID:	A08693-011	Matrix:	Ground Water		
Method: EPA 5030C/EPA 8260D			De	scription:	VAP-03-05_55_60				
					Prepara	ition	Ana	alysis	
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
37.2-Hexanone	U	μg/L	50	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
38. Isopropylbenzene	U	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
39.4-Methyl-2-pentanone	U	μg/L	50	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
40. Methylene Chloride	U	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
‡ 41.2-Methylnaphthalene	U	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
42.MTBE	U	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
43. Naphthalene	U	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
44. n-Propylbenzene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
45. Styrene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
46.1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
47.1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
48. Tetrachloroethene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
49. Toluene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
50.1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
‡ 52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
53. Trichloroethene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
55. 1,2,3-Trichloropropane	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
56. 1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
57. 1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
58.1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
59. Vinyl Chloride	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
60. m&p-Xylene	U	μg/L	2.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
61. o-Xylene	U	μg/L	1.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC
‡ 62. Xylenes	U	μg/L	3.0	1.0	05/31/22	VI22E31B	06/01/22 05:26	VI22E31B	SNC



Analytical Laboratory Report Laboratory Project Number: A08693

Order: A08693 Date: 06/02/22

Definitions/ Qualifiers:

- A: Spike recovery or precision unusable due to dilution.
- B: The analyte was detected in the associated method blank.
- E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
- J: The concentration is an estimated value.
- M: Modified Method
- U: The analyte was not detected at or above the reporting limit.
- X: Matrix Interference has resulted in a raised reporting limit or distorted result.
- W: Results reported on a wet-weight basis.
- *: Value reported is outside QC limits

Exception Summary:

HV : Per method requirements, the hold time is reduced from 14 days to 7 days when the sample pH is >2. The hold time

was exceeded.

ICV+ : Recovery in the associated initial calibration verification sample exceeds the upper control limit. Results may be biased

high.

L+ : Recovery in the associated laboratory sample (LCS) exceeds the upper control limit. Results may be biased high.

: Recovery in the associated continuing calibration verification sample (CCV) exceeds the upper control limit. Results

may be biased high.

Analysis Locations:

All analyses performed in Holt.



Accreditation Number(s):

T104704518-19-8 (TX)

lab@fibertec.us

Page:



Order ID: A08693 Page: 1 of 5 06/02/22 Date:

VI22E31B: Method Blank (MB) EPA 8260D

Run Time: VI22E31B.MB 05/31/2022 23:19	9 [VI22E31B]			
	MB Result	MB MB RDL		
		Qualifier		
Analyte	μg/L	μg/L		
Acetone	U	50		
Acrylonitrile	U	2.0		
Benzene	U	1.0		
Bromobenzene	U	1.0		
Bromochloromethane	U	1.0		
Bromodichloromethane	U	1.0		
Bromoform	U	1.0		
Bromomethane	U	5.0		
2-Butanone	U	25		
n-Butylbenzene	U	1.0		
sec-Butylbenzene	U	1.0		
tert-Butylbenzene	U	1.0		
Carbon Disulfide	U	5.0		
Carbon Tetrachloride	U	1.0		
Chlorobenzene	U	1.0		
Chloroethane	U	5.0		
Chloroform	U	1.0		
Chloromethane	U	5.0		
2-Chlorotoluene	U	5.0		
1,2-Dibromo-3-chloropropane (SIM)	U	1.0		
Dibromochloromethane	U	5.0		
Dibromomethane	U	5.0		
1,2-Dichlorobenzene	U	1.0		
1,3-Dichlorobenzene	U	1.0		
1,4-Dichlorobenzene	U	1.0		
Dichlorodifluoromethane	U	5.0		
1,1-Dichloroethane	U	1.0		
1,2-Dichloroethane	U	1.0		
1,1-Dichloroethene	U	1.0		
cis-1,2-Dichloroethene	U	1.0		
trans-1,2-Dichloroethene	U	1.0		
1,2-Dichloropropane	U	1.0		
cis-1,3-Dichloropropene	U	0.50		
	1914 Holloway Drive 11766 E. Grand River	Holt, MI 48842 Brighton, MI 48116	T: (517) 699-0345 T: (810) 220-3300	F: (517) 699-0388 F: (810) 220-3311

DCSID: G-6017.2 (06/10/2020)

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Brighton, MI 48116 Cadillac, MI 49601

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F: (810) 220-3311 F: (231) 775-8584



Order ID: A08693 Page: 2 of 5 Date: 06/02/22

VI22E31B: Method Blank (MB)

Run Time: VI22E31B.MB 05/31/2022 2			
	MB Result	MB	MB RDL
		Qualifier	
Analyte	μg/L		μg/L
trans-1,3-Dichloropropene	U		0.50
Ethylbenzene	U		1.0
Ethylene Dibromide	U		1.0
2-Hexanone	U		50
Isopropylbenzene	U		5.0
4-Methyl-2-pentanone	U		50
Methylene Chloride	U		5.0
2-Methylnaphthalene	U		5.0
MTBE	U		5.0
Naphthalene	U		5.0
n-Propylbenzene	U		1.0
Styrene	U		1.0
1,1,1,2-Tetrachloroethane	U		1.0
1,1,2,2-Tetrachloroethane	U		1.0
Tetrachloroethene	U		1.0
Toluene	U		1.0
1,2,4-Trichlorobenzene	U		5.0
1,1,1-Trichloroethane	U		1.0
1,1,2-Trichloroethane	U		1.0
Trichloroethene	U		1.0
Trichlorofluoromethane	U		1.0
1,2,3-Trichloropropane	U		1.0
1,2,3-Trimethylbenzene	U		1.0
1,2,4-Trimethylbenzene	U		1.0
1,3,5-Trimethylbenzene	U		1.0
Vinyl Chloride	U		1.0
m&p-Xylene	U		2.0
o-Xylene	U		1.0
4-Bromofluorobenzene(S)	95		80-120
Dibromofluoromethane(S)	112		80-120
1,2-Dichloroethane-d4(S)	92		80-120
Toluene-d8(S)	99		80-120

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order ID: A08693 Page: 3 of 5 Date: 06/02/22

VI22E31B: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VI22E31B.LCS: 05/31/2022 22:01	[VI22E31B] VI22E3	1B.LCSD: 05/31/20)22 22:27 [VI22	E31B]								
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Am	ount			Qualifier	Spike Amoun	t Result	Rec.	Qualifier			Qualifier
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
Acetone	50.0	42.0	84	54-140		50.0	41.6	83		1	20	
Acrylonitrile	50.0	54.7	109	70-130		50.0	55.4	111		2	20	
Benzene	50.0	47.6	95	80-120		50.0	49.4	99		4	20	
Bromobenzene	50.0	46.7	93	75-125		50.0	48.0	96		3	20	
Bromochloromethane	50.0	49.2	98	70-130		50.0	50.6	101		3	20	
Bromodichloromethane	50.0	45.5	91	75-120		50.0	47.0	94		3	20	
Bromoform	50.0	47.5	95	70-130		50.0	48.0	96		1	20	
Bromomethane	50.0	69.3	139	68-135	*	50.0	71.1	142	*	2	20	
2-Butanone	50.0	47.7	95	70-148		50.0	47.2	94		1	20	
n-Butylbenzene	50.0	56.3	113	70-133		50.0	58.2	116		3	20	
sec-Butylbenzene	50.0	51.3	103	70-125		50.0	53.2	106		3	20	
tert-Butylbenzene	50.0	50.4	101	70-130		50.0	51.8	104		3	20	
Carbon Disulfide	50.0	48.3	97	70-130		50.0	50.3	101		4	20	
Carbon Tetrachloride	50.0	44.6	89	70-130		50.0	46.6	93		4	20	
Chlorobenzene	50.0	47.7	95	80-120		50.0	49.5	99		4	20	
Chloroethane	50.0	51.0	102	61-130		50.0	53.0	106		4	20	
Chloroform	50.0	47.8	96	80-120		50.0	50.4	101		5	20	
Chloromethane	50.0	52.1	104	67-125		50.0	54.6	109		5	20	
2-Chlorotoluene	50.0	48.2	96	75-125		50.0	49.5	99		3	20	
1,2-Dibromo-3-chloropropane (SIM)	50.0	46.3	93	70-130		50.0	46.0	92		1	20	
Dibromochloromethane	50.0	44.6	89	70-130		50.0	46.0	92		3	20	
Dibromomethane	50.0	47.6	95	75-125		50.0	48.1	96		1	20	
1,2-Dichlorobenzene	50.0	48.7	97	70-120		50.0	50.2	100		3	20	
1,3-Dichlorobenzene	50.0	50.0	100	75-125		50.0	51.2	102		2	20	
1,4-Dichlorobenzene	50.0	46.3	93	75-125		50.0	48.7	97		4	20	
Dichlorodifluoromethane	50.0	45.1	90	70-136		50.0	47.1	94		4	20	
1,1-Dichloroethane	50.0	48.9	98	70-130		50.0	50.8	102		4	20	
1,2-Dichloroethane	50.0	41.4	83	70-130		50.0	41.8	84		1	20	
1,1-Dichloroethene	50.0	45.3	91	78-120		50.0	47.0	94		3	20	
cis-1,2-Dichloroethene	50.0	46.9	94	70-125		50.0	49.1	98		4	20	
trans-1,2-Dichloroethene	50.0	49.9	100	70-130		50.0	52.5	105		5	20	
1,2-Dichloropropane	50.0	49.5	99	80-121		50.0	51.5	103		4	20	
cis-1,3-Dichloropropene	50.0	46.7	93	70-130		50.0	48.5	97		4	20	
	1014 Holloway I		Halt MI 100		T (545)	600.0345		F. /F17) 600 0300				

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order ID: A08693 Page: 4 of 5 Date: 06/02/22

VI22E31B: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Am	ount			Qualifier	Spike Amoun	t Result	Rec.	Qualifier			Qualifier
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
rans-1,3-Dichloropropene	50.0	50.6	101	70-132		50.0	51.9	104		3	20	
Ethylbenzene	50.0	48.4	97	80-120		50.0	50.4	101		4	20	
Ethylene Dibromide	50.0	49.2	98	80-120		50.0	50.4	101		3	20	
2-Hexanone	50.0	43.7	87	70-130		50.0	44.2	88		1	20	
sopropylbenzene	50.0	49.7	99	75-125		50.0	51.7	103		4	20	
1-Methyl-2-pentanone	50.0	53.7	107	70-130		50.0	54.4	109		2	20	
Methylene Chloride	50.0	48.3	97	70-130		50.0	50.2	100		3	20	
2-Methylnaphthalene	50.0	48.0	96	70-130		50.0	47.6	95		1	20	
ИТВЕ	50.0	49.8	100	70-125		50.0	50.5	101		1	20	
Naphthalene	50.0	50.8	102	70-130		50.0	51.2	102		0	20	
n-Propylbenzene	50.0	51.3	103	70-130		50.0	52.8	106		3	20	
Styrene	50.0	45.5	91	70-130		50.0	47.2	94		3	20	
,1,1,2-Tetrachloroethane	50.0	47.7	95	80-130		50.0	48.5	97		2	20	
,1,2,2-Tetrachloroethane	50.0	58.0	116	70-130		50.0	58.1	116		0	20	
Tetrachloroethene	50.0	49.1	98	70-130		50.0	50.7	101		3	20	
oluene	50.0	48.7	97	80-120		50.0	50.7	101		4	20	
,2,4-Trichlorobenzene	50.0	49.5	99	70-130		50.0	51.4	103		4	20	
,1,1-Trichloroethane	50.0	48.6	97	70-130		50.0	50.5	101		4	20	
,1,2-Trichloroethane	50.0	48.0	96	75-125		50.0	49.2	98		2	20	
richloroethene	50.0	43.3	87	71-125		50.0	45.1	90		3	20	
richlorofluoromethane	50.0	49.4	99	70-133		50.0	51.5	103		4	20	
,2,3-Trichloropropane	50.0	50.8	102	75-125		50.0	51.3	103		1	20	
,2,3-Trimethylbenzene	50.0	47.7	95	70-130		50.0	49.2	98		3	20	
,2,4-Trimethylbenzene	50.0	51.3	103	75-130		50.0	52.7	105		2	20	
,3,5-Trimethylbenzene	50.0	50.3	101	75-130		50.0	52.6	105		4	20	
/inyl Chloride	50.0	52.9	106	74-125		50.0	55.5	111		5	20	
n&p-Xylene	100	96.8	97	75-130		100	100	100		3	20	
-Xylene	50.0	48.5	97	80-120		50.0	50.3	101		4	20	
4-Bromofluorobenzene(S)			98	80-120				97				
Dibromofluoromethane(S)			106	80-120				106				
1,2-Dichloroethane-d4(S)			86	80-120				86				
Toluene-d8(S)			100	80-120				100				

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368 F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584

RSN: VI22E31B-221530602110610



Order ID: A08693 Page: 5 of 5 Date: 06/02/22

Definitions/ Qualifiers:

- U: The analyte was not detected at or above the Reporting Limit (RL).
- *: Value reported is outside QC limits

Exception Summary:

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

Report Generated By:

By Sue Ricketts at 11:07 AM, Jun 02, 2022

RSN: VI22E31B-221530602110610



Analytical Laboratory

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Industrial Hygiene Services, Inc.

1914 Holloway Drive Holt, MI 48842

Phone: 517 699 0345 Fax: 517 699 0382

email: asbestos@fibertecihs.com

Geoprobe

11766 E. Grand River Rd. Brighton, MI 48116

Phone: 810 220 3300 Fax: 810 220 3311

Chain of Custody # 171066

Client Name: The				PARAMETERS		Matrix Code	Deliverables
Contact Person: Chargian Suchl, John Mclan, S						s Soil GW Ground Water	Level 2
Project Name/ Number: 30046730 TRE Milford	(cope)		0		PLE	A Air Sw Surface Water O Oil www Waste Water	Level 3
Email distribution list: John. Mclumis @ aveads.com	MATRIX (SEE RIGHT CORNER FOR CODE)	# OF CONTAINERS	928		HOLD SAMPLE	P Wipe X Other: Specify	EDD
Quote# 849	(SEE RIG	NTA	Tex		-		
Purchase Order#	TRIX	OF C	3				
Date Time Sample # Client Sample Descriptor	_	-			+	Remarks:	
5123 1257 1 VAP-02-01_15-20	GN	3	6		-		
1 12° 2 VAP-03-01 15-20 1143 3 VAP-02-02-25-30	GU		×				
14 3 VAR-02-02-25-30	GU	3	X				
1520 4 VAP-03-02-25-30	60		×				
1635 5 VAP-02-UZ-35-40	GU	2	X				
1755 6 VAP-03-03-35 46	GW	3	X			Discord; don't run	
1635 5 VAP-02-UZ 35-40 1755 6 VAP-03-03-35-46 5/44 9/5 7 VAP-U3-03-35-40	Gu		X			Received By Lal)
920 S VAP-UZ-C4-45-50	GU	3	+				
1105 9 VAP-02-05,55_60	44		×			MAY 2 4 2022	
1045 10 VAR-03-04-45-50	Gu	13	×		P	On Ice Initials:	
Comments:	In at	/ Tue		Pageirad Pyr			
Sampled/Relinquished By:	5	72	23	1844 Arcadis	Fr	ridge	
Relinquished By:	Date	57	2	Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Received By: Re	5	es del	
Relinquished By: Le Sei do	Date	e/ Tim	1º2 c	Received By Laborator	y:	11 15/1/20	1.70
Turnaround Time ALL RESULTS WILL BE SENT BY THE END	OF THE B	USINI	ESS D	ay Maly W	_	LAB USE ONLY	1. 60
1 bus. day2 bus. days3 bus. days		4	bus. c		tec pi	roject number:	
5-7 bus. days (standard) Other (specify time/date requirement): _				Tem		ure upon receipt at Lab: ~7^(
		Ph		for terms and conditions			
Wal of Made 5/24/22		15	: 1	South			



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e 8660 S. Mackinaw Trail

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11766 E. Grand River Rd. Brighton, MI 48116 Phone: 810 220 3300

Fax: 810 220 3311

Chain of Custody #

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PAGE ___ of ___

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Friday, June 3, 2022

Fibertec Project Number: A08733

Project Identification: TRW Milford (30046730) /30046730

Submittal Date: 05/25/2022

Mr. Christian Seidel Arcadis U.S., Inc. - Novi 28550 Cabot Drive Suite 500 Novi, MI 48377

Dear Mr. Seidel,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

By Katherine Jones at 3:34 PM, Jun 03, 2022

For Daryl P. Strandbergh Laboratory Director

Enclosures



Order: A08733 Date: 06/03/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-03-07_75_80 Chain of Custody: 168189

 Client Project Name:
 TRW Milford (30046730)
 Sample No:
 1
 Collect Date:
 05/24/22

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 15:50

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/M	I S			Aliq	uot ID:	A08733-001	Matrix:	Ground Water		
Method: EPA 5030C/EPA 8260D				Des	cription:	VAP-03-07_75_80				
						Prepara	ation	An	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U	V+	μg/L	50	1.0	06/01/22	VI22F01B	06/02/22 04:41	VI22F01B	BRC
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	06/01/22	VI22F01B	06/02/22 04:41	VI22F01B	BRC
3. Benzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 04:41	VI22F01B	BRC
4. Bromobenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 04:41	VI22F01B	BRC
5. Bromochloromethane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 04:41	VI22F01B	BRC
6. Bromodichloromethane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 04:41	VI22F01B	BRC
7. Bromoform	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 04:41	VI22F01B	BRC
8. Bromomethane	U	V+ L+ ICV+	μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 04:41	VI22F01B	BRC
9.2-Butanone	U	V+	μg/L	25	1.0	06/01/22	VI22F01B	06/02/22 04:41	VI22F01B	BRC
10. n-Butylbenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 04:41	VI22F01B	BRC
11. sec-Butylbenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 04:41	VI22F01B	BRC
12. tert-Butylbenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 04:41	VI22F01B	BRC
13. Carbon Disulfide	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 04:41	VI22F01B	BRC
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 04:41	VI22F01B	BRC
15. Chlorobenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 04:41	VI22F01B	BRC
16. Chloroethane	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 04:41	VI22F01B	BRC
17. Chloroform	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 04:41	VI22F01B	BRC
18. Chloromethane	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 04:41	VI22F01B	BRC
19.2-Chlorotoluene	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 04:41	VI22F01B	BRC
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 04:41	VI22F01B	BRC
21. Dibromochloromethane	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 04:41	VI22F01B	BRC
22. Dibromomethane	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 04:41	VI22F01B	BRC
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 04:41	VI22F01B	BRC
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 04:41	VI22F01B	BRC
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 04:41	VI22F01B	BRC
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 04:41	VI22F01B	BRC
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 04:41	VI22F01B	BRC
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 04:41	VI22F01B	BRC
29. 1,1-Dichloroethene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 04:41	VI22F01B	BRC
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 04:41	VI22F01B	BRC
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 04:41	VI22F01B	BRC
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 04:41	VI22F01B	BRC
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	06/01/22	VI22F01B	06/02/22 04:41	VI22F01B	BRC
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	06/01/22	VI22F01B	06/02/22 04:41	VI22F01B	BRC
35. Ethylbenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 04:41	VI22F01B	BRC
36. Ethylene Dibromide	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 04:41	VI22F01B	BRC

1914 Holloway Drive 11766 E Grand River 8660 S Madkinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368 F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584



Order: A08733 Date: 06/03/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-03-07_75_80 Chain of Custody: 168189

Client Project Name: TRW Milford (30046730) Sample No: 1 Collect Date: 05/24/22

Description:

VAP-03-07_75_80

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 15:50

Sample Comments:

Method: EPA 5030C/EPA 8260D

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Aliquot ID: A08733-001 Matrix: Ground Water

Preparation Analysis Parameter(s) Result Q Units Reporting Limit Dilution P. Date P. Batch A. Date A. Batch Init. 37.2-Hexanone U μg/L 50 1.0 06/01/22 VI22F01B 06/02/22 04:41 VI22F01B BRC 38. Isopropylbenzene U 5.0 1 0 06/01/22 VI22F01B 06/02/22 04:41 VI22F01B BRC μg/L U 06/01/22 39. 4-Methyl-2-pentanone μg/L 50 1.0 VI22F01B 06/02/22 04:41 VI22F01B BRC U VI22F01B 40. Methylene Chloride 5.0 06/01/22 VI22F01B BRC μg/L 1.0 06/02/22 04:41 U 41.2-Methylnaphthalene μg/L 5.0 1.0 06/01/22 VI22F01B 06/02/22 04:41 VI22F01B BRC 42. MTBE U μg/L 5.0 1.0 06/01/22 VI22F01B 06/02/22 04:41 VI22F01B BRC 43. Naphthalene U 5.0 1.0 06/01/22 VI22F01B 06/02/22 04:41 VI22F01B BRC μg/L 44. n-Propylbenzene U μg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 04:41 VI22F01B BRC U 1.0 06/01/22 VI22F01B BRC 45. Styrene 1.0 06/02/22 04:41 VI22F01B μg/L 46. 1,1,1,2-Tetrachloroethane U 1.0 1.0 06/01/22 VI22F01B 06/02/22 04:41 VI22F01B **BRC** μg/L U 47. 1,1,2,2-Tetrachloroethane µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 04:41 VI22F01B BRC U 06/01/22 VI22F01B 06/02/22 04:41 VI22F01B **BRC** 48. Tetrachloroethene μg/L 1.0 1.0 49 Toluene U μg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 04:41 VI22F01B BRC U 50. 1,2,4-Trichlorobenzene μg/L 5.0 1.0 06/01/22 VI22F01B 06/02/22 04:41 VI22F01B BRC U VI22F01B VI22F01B BRC 51.1,1,1-Trichloroethane μg/L 1.0 1.0 06/01/22 06/02/22 04:41 ‡ 52.1,1,2-Trichloroethane U μg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 04:41 VI22F01B U 53. Trichloroethene µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 04:41 VI22F01B **BRC** 54. Trichlorofluoromethane U μg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 04:41 VI22F01B BRC U 55. 1,2,3-Trichloropropane μg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 04:41 VI22F01B BRC U 1.0 ‡ 56.1,2,3-Trimethylbenzene μg/L 1.0 06/01/22 VI22F01B 06/02/22 04:41 VI22F01B BRC 57. 1,2,4-Trimethylbenzene U μg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 04:41 VI22F01B 58.1,3,5-Trimethylbenzene U 06/01/22 VI22F01B BRC μg/L 1.0 1.0 06/02/22 04:41 VI22F01B 59. Vinyl Chloride U 1.0 1.0 06/01/22 VI22F01B 06/02/22 04:41 VI22F01B **BRC** μg/L U 60. m&p-Xylene 20 1 0 06/01/22 VI22F01B 06/02/22 04:41 VI22F01B BRC μg/L U 61. o-Xylene μg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 04:41 VI22F01B BRC U ‡ 62. Xylenes μg/L 3.0 1.0 06/01/22 VI22F01B 06/02/22 04:41 VI22F01B



Order: A08733 Date: 06/03/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-03-06_65_70 Chain of Custody: 168189

Client Project Name: **TRW Milford (30046730)** Sample No: **2** Collect Date: **05/24/22**

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 14:00

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/	MS			Aliq	uot ID:	A08733-002	Matrix:	Ground Water		
Method: EPA 5030C/EPA 8260D				Desc	cription:	VAP-03-06_65_70				
						Prepara	ation	Ana	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U	V+	μg/L	50	1.0	06/01/22	VI22F01B	06/02/22 05:07	VI22F01B	BRC
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	06/01/22	VI22F01B	06/02/22 05:07	VI22F01B	BRC
3. Benzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:07	VI22F01B	BRC
4. Bromobenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:07	VI22F01B	BRC
5. Bromochloromethane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:07	VI22F01B	BRC
6. Bromodichloromethane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:07	VI22F01B	BRC
7. Bromoform	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:07	VI22F01B	BRC
8. Bromomethane	U	V+ L+ ICV+	μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 05:07	VI22F01B	BRC
9. 2-Butanone	U	V+	μg/L	25	1.0	06/01/22	VI22F01B	06/02/22 05:07	VI22F01B	BRC
10. n-Butylbenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:07	VI22F01B	BRC
11. sec-Butylbenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:07	VI22F01B	BRC
12. tert-Butylbenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:07	VI22F01B	BRC
13. Carbon Disulfide	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 05:07	VI22F01B	BRC
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:07	VI22F01B	BRC
15. Chlorobenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:07	VI22F01B	BRC
16. Chloroethane	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 05:07	VI22F01B	BRC
17. Chloroform	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:07	VI22F01B	BRC
18. Chloromethane	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 05:07	VI22F01B	BRC
19. 2-Chlorotoluene	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 05:07	VI22F01B	BRC
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:07	VI22F01B	BRC
21. Dibromochloromethane	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 05:07	VI22F01B	BRC
22. Dibromomethane	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 05:07	VI22F01B	BRC
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:07	VI22F01B	BRC
24.1,3-Dichlorobenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:07	VI22F01B	BRC
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:07	VI22F01B	BRC
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 05:07	VI22F01B	BRC
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:07	VI22F01B	BRC
28. 1,2-Dichloroethane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:07	VI22F01B	BRC
29. 1,1-Dichloroethene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:07	VI22F01B	BRC
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:07	VI22F01B	BRC
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:07	VI22F01B	BRC
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:07	VI22F01B	BRC
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	06/01/22	VI22F01B	06/02/22 05:07	VI22F01B	BRC
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	06/01/22	VI22F01B	06/02/22 05:07	VI22F01B	BRC
35. Ethylbenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:07	VI22F01B	BRC
36. Ethylene Dibromide	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:07	VI22F01B	BRC

1914 Holloway Drive 11766 E Gand River 8660 S Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368 F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584



Order: A08733 Date: 06/03/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-03-06_65_70 Chain of Custody: 168189

Client Project Name: TRW Milford (30046730) Sample No: 2 Collect Date: 05/24/22

Description:

VAP-03-06_65_70

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 14:00

Sample Comments:

Method: EPA 5030C/EPA 8260D

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Aliquot ID: A08733-002 Matrix: Ground Water

Preparation Analysis Parameter(s) Result Q Units Reporting Limit Dilution P. Date A. Date P. Batch A. Batch Init. 37.2-Hexanone U μg/L 50 1.0 06/01/22 VI22F01B 06/02/22 05:07 VI22F01B BRC 38. Isopropylbenzene U 5.0 1 0 06/01/22 VI22F01B 06/02/22 05:07 VI22F01B BRC μg/L U 06/01/22 39. 4-Methyl-2-pentanone μg/L 50 1.0 VI22F01B 06/02/22 05:07 VI22F01B BRC U VI22F01B 40. Methylene Chloride 5.0 06/01/22 VI22F01B BRC μg/L 1.0 06/02/22 05:07 U 41.2-Methylnaphthalene μg/L 5.0 1.0 06/01/22 VI22F01B 06/02/22 05:07 VI22F01B BRC 42. MTBE U μg/L 5.0 1.0 06/01/22 VI22F01B 06/02/22 05:07 VI22F01B BRC 43. Naphthalene U 5.0 1.0 06/01/22 VI22F01B 06/02/22 05:07 VI22F01B BRC μg/L 44. n-Propylbenzene U μg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 05:07 VI22F01B BRC U 1.0 06/01/22 VI22F01B BRC 45. Styrene 1.0 06/02/22 05:07 VI22F01B μg/L 46. 1,1,1,2-Tetrachloroethane U 1.0 1.0 06/01/22 VI22F01B 06/02/22 05:07 VI22F01B **BRC** μg/L U 1.0 47. 1,1,2,2-Tetrachloroethane μg/L 1.0 06/01/22 VI22F01B 06/02/22 05:07 VI22F01B BRC U 06/01/22 VI22F01B VI22F01B **BRC** 48. Tetrachloroethene μg/L 1.0 1.0 06/02/22 05:07 49 Toluene U μg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 05:07 VI22F01B BRC U 50. 1,2,4-Trichlorobenzene μg/L 5.0 1.0 06/01/22 VI22F01B 06/02/22 05:07 VI22F01B BRC VI22F01B BRC U VI22F01B 51.1,1,1-Trichloroethane μg/L 1.0 1.0 06/01/22 06/02/22 05:07 ‡ 52.1,1,2-Trichloroethane U μg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 05:07 VI22F01B U 53. Trichloroethene µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 05:07 VI22F01B **BRC** 54. Trichlorofluoromethane U μg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 05:07 VI22F01B BRC U 55. 1,2,3-Trichloropropane μg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 05:07 VI22F01B BRC U 1.0 ‡ 56.1,2,3-Trimethylbenzene μg/L 1.0 06/01/22 VI22F01B 06/02/22 05:07 VI22F01B BRC 57. 1,2,4-Trimethylbenzene U μg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 05:07 VI22F01B 58.1,3,5-Trimethylbenzene U 06/01/22 VI22F01B BRC μg/L 1.0 1.0 06/02/22 05:07 VI22F01B 59. Vinyl Chloride U 1.0 1.0 06/01/22 VI22F01B 06/02/22 05:07 VI22F01B **BRC** μg/L U 60. m&p-Xylene 20 1 0 06/01/22 VI22F01B VI22F01B BRC μg/L 06/02/22 05:07 U 61. o-Xylene μg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 05:07 VI22F01B BRC U 06/01/22 VI22F01B 06/02/22 05:07 VI22F01B ‡ 62. Xylenes μg/L 3.0 1.0



Order: A08733 Date: 06/03/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-02-06_65_70 Chain of Custody: 168189

Client Project Name: **TRW Milford (30046730)** Sample No: **3** Collect Date: **05/24/22**

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 14:12

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/	MS			Aliq	uot ID:	A08733-003	Matrix:	Ground Water		
Method: EPA 5030C/EPA 8260D				Desc	cription:	VAP-02-06_65_70				
						Prepara	ation	Ana	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U	V+	μg/L	50	1.0	06/01/22	VI22F01B	06/02/22 05:33	VI22F01B	BRC
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	06/01/22	VI22F01B	06/02/22 05:33	VI22F01B	BRC
3. Benzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:33	VI22F01B	BRC
4. Bromobenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:33	VI22F01B	BRC
5. Bromochloromethane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:33	VI22F01B	BRC
6. Bromodichloromethane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:33	VI22F01B	BRC
7. Bromoform	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:33	VI22F01B	BRC
8. Bromomethane	U	V+ L+ ICV+	μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 05:33	VI22F01B	BRC
9. 2-Butanone	U	V+	μg/L	25	1.0	06/01/22	VI22F01B	06/02/22 05:33	VI22F01B	BRC
10. n-Butylbenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:33	VI22F01B	BRC
11. sec-Butylbenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:33	VI22F01B	BRC
12. tert-Butylbenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:33	VI22F01B	BRC
13. Carbon Disulfide	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 05:33	VI22F01B	BRC
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:33	VI22F01B	BRC
15. Chlorobenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:33	VI22F01B	BRC
16. Chloroethane	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 05:33	VI22F01B	BRC
17. Chloroform	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:33	VI22F01B	BRC
18. Chloromethane	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 05:33	VI22F01B	BRC
19. 2-Chlorotoluene	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 05:33	VI22F01B	BRC
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:33	VI22F01B	BRC
21. Dibromochloromethane	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 05:33	VI22F01B	BRC
22. Dibromomethane	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 05:33	VI22F01B	BRC
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:33	VI22F01B	BRC
24.1,3-Dichlorobenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:33	VI22F01B	BRC
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:33	VI22F01B	BRC
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 05:33	VI22F01B	BRC
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:33	VI22F01B	BRC
28. 1,2-Dichloroethane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:33	VI22F01B	BRC
29. 1,1-Dichloroethene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:33	VI22F01B	BRC
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:33	VI22F01B	BRC
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:33	VI22F01B	BRC
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:33	VI22F01B	BRC
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	06/01/22	VI22F01B	06/02/22 05:33	VI22F01B	BRC
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	06/01/22	VI22F01B	06/02/22 05:33	VI22F01B	BRC
35. Ethylbenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:33	VI22F01B	BRC
36. Ethylene Dibromide	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:33	VI22F01B	BRC

1914 Holloway Drive 11766 E Gand River 8660 S Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368 F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584



Order: A08733 Date: 06/03/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-02-06_65_70 Chain of Custody: 168189

Client Project Name: TRW Milford (30046730) Sample No: 3 Collect Date: 05/24/22

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 14:12

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Aliquot ID: A08733-003 Matrix: Ground Water

Method: EPA 5030C/EPA 8260D Description: VAP-02-06_65_70 Preparation Analysis Parameter(s) Result Q Units Reporting Limit Dilution P. Date A. Date P. Batch A. Batch Init. 37.2-Hexanone U μg/L 50 1.0 06/01/22 VI22F01B 06/02/22 05:33 VI22F01B BRC 38. Isopropylbenzene U 5.0 1 0 06/01/22 VI22F01B 06/02/22 05:33 VI22F01B BRC μg/L U 06/01/22 39. 4-Methyl-2-pentanone μg/L 50 1.0 VI22F01B 06/02/22 05:33 VI22F01B BRC U VI22F01B 40. Methylene Chloride 5.0 06/01/22 VI22F01B BRC μg/L 1.0 06/02/22 05:33 U 41.2-Methylnaphthalene μg/L 5.0 1.0 06/01/22 VI22F01B 06/02/22 05:33 VI22F01B BRC 42. MTBE U μg/L 5.0 1.0 06/01/22 VI22F01B 06/02/22 05:33 VI22F01B BRC 43. Naphthalene U 5.0 1.0 06/01/22 VI22F01B 06/02/22 05:33 VI22F01B BRC μg/L 44. n-Propylbenzene U μg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 05:33 VI22F01B BRC U 1.0 06/01/22 VI22F01B 06/02/22 05:33 BRC 45. Styrene 1.0 VI22F01B μg/L 46. 1,1,1,2-Tetrachloroethane U 1.0 1.0 06/01/22 VI22F01B 06/02/22 05:33 VI22F01B **BRC** μg/L U 1.0 47. 1,1,2,2-Tetrachloroethane μg/L 1.0 06/01/22 VI22F01B 06/02/22 05:33 VI22F01B BRC U 06/01/22 VI22F01B 06/02/22 05:33 VI22F01B **BRC** 48. Tetrachloroethene μg/L 1.0 1.0 49 Toluene U μg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 05:33 VI22F01B BRC U 50. 1,2,4-Trichlorobenzene μg/L 5.0 1.0 06/01/22 VI22F01B 06/02/22 05:33 VI22F01B BRC VI22F01B BRC U VI22F01B 51.1,1,1-Trichloroethane μg/L 1.0 1.0 06/01/22 06/02/22 05:33 ‡ 52.1,1,2-Trichloroethane U μg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 05:33 VI22F01B U 53. Trichloroethene µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 05:33 VI22F01B **BRC** 54. Trichlorofluoromethane U μg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 05:33 VI22F01B **BRC** U 55. 1,2,3-Trichloropropane μg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 05:33 VI22F01B BRC U 1.0 ‡ 56.1,2,3-Trimethylbenzene μg/L 1.0 06/01/22 VI22F01B 06/02/22 05:33 VI22F01B BRC 57. 1,2,4-Trimethylbenzene U μg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 05:33 VI22F01B 58.1,3,5-Trimethylbenzene U 06/01/22 VI22F01B BRC μg/L 1.0 1.0 06/02/22 05:33 VI22F01B 59. Vinyl Chloride U 1.0 1.0 06/01/22 VI22F01B 06/02/22 05:33 VI22F01B **BRC** μg/L U 60. m&p-Xylene 20 1 0 06/01/22 VI22F01B VI22F01B BRC μg/L 06/02/22 05:33 U 61. o-Xylene μg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 05:33 VI22F01B BRC U 06/01/22 ‡ 62. Xylenes μg/L 3.0 1.0 VI22F01B 06/02/22 05:33 VI22F01B



Order: A08733 Date: 06/03/22

Matrix: Blank: Equipment

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Equipment Valve Chain of Custody: 168189

Client Project Name: TRW Milford (30046730) Sample No: 4 Collect Date: 05/24/22

A08733-004

Aliquot ID:

Client Project No: 30046730 Sample Matrix: Blank: Equipment Collect Time: 15:30

Sample Comments:

Volatile Organic Compounds (VOCs) by GC/MS

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

\$ 2. Acrylonitrile U μg/L 3. Berzene U μg/L 1.0 1.0 06/01/22 Vi22F018 06/02/22 00:46 Vi22F018 BRC 3. Berzene U μg/L 1.0 1.0 06/01/22 Vi22F018 06/02/22 00:46 Vi22F018 BRC 5. Bromochloromethane U μg/L 1.0 1.0 06/01/22 Vi22F018 06/02/22 00:46 Vi22F018 BRC 6. Bromochloromethane U μg/L 1.0 1.0 06/01/22 Vi22F018 06/02/22 00:46 Vi22F018 BRC 6. Bromochloromethane U μg/L 1.0 1.0 06/01/22 Vi22F018 06/02/22 00:46 Vi22F018 BRC 6. Bromochloromethane U μg/L 1.0 1.0 06/01/22 Vi22F018 06/02/22 00:46 Vi22F018 BRC 8. Bromomethane U μg/L 1.0 1.0 06/01/22 Vi22F018 06/02/22 00:46 Vi22F018 BRC 8. Bromomethane U μg/L 1.0 1.0 06/01/22 Vi22F018 06/02/22 00:46 Vi22F018 BRC 8. Bromomethane U μg/L 1.0 1.0 06/01/22 Vi22F018 06/02/22 00:46 Vi22F018 BRC 11.sec-Butylbenzene U μg/L 1.0 1.0 06/01/22 Vi22F018 06/02/22 00:46 Vi22F018 BRC 11.sec-Butylbenzene U μg/L 1.0 1.0 06/01/22 Vi22F018 06/02/22 00:46 Vi22F018 BRC 11.sec-Butylbenzene U μg/L 1.0 1.0 06/01/22 Vi22F018 06/02/22 00:46 Vi22F018 BRC 11.sec-Butylbenzene U μg/L 1.0 1.0 06/01/22 Vi22F018 06/02/22 00:46 Vi22F018 BRC 11.sec-Butylbenzene U μg/L 1.0 1.0 06/01/22 Vi22F018 06/02/22 00:46 Vi22F018 BRC 11.sec-Butylbenzene U μg/L 1.0 1.0 06/01/22 Vi22F018 06/02/22 00:46 Vi22F018 BRC 14. Carbon Tetrachloride U μg/L 1.0 1.0 06/01/22 Vi22F018 06/02/22 00:46 Vi22F018 BRC 15. Chlorobenzene U μg/L 1.0 1.0 06/01/22 Vi22F018 06/02/22 00:46 Vi22F018 BRC 16. Chlorobenzene U μg/L 1.0 1.0 06/01/22 Vi22F018 06/02/22 00:46 Vi22F018 BRC 17. Chlorobenzene U μg/L 1.0 1.0 06/01/22 Vi22F018 06/02/22 00:46 Vi22F018 BRC 18. Chloromethane U μg/L 1.0 1.0 06/01/22 Vi22F018 06/02/22 00:46 Vi22F018 BRC 18. Chloromethane U μg/L 1.0 1.0 06/01/22 Vi22F018 06/02/22 00:46 Vi22F018 BRC 19. 2-Chloromethane U μg/L 1.0 1.0 06/01/22 Vi22F018 06/02/22 00:46 Vi22F018 BRC 19. 2-Chloromethane U μg/L 1.0 1.0 06/01/22 Vi22F018 06/02/22 00:46 Vi22F018 BRC 19. 2-Chloromethane U μg/L 1.0 1.0 06/01/22 Vi22F018 06/02/22 00:46 Vi22F018 BRC 12. 1.1-Dichlorobenzene U μg/L 1.0 1.0 06/01/22 Vi22F018 06/02/22 00:46 Vi22	volatile Organic Compounds (VOCs) by GC	/IVIS			Aliq	uot ID:	AU0/33-UU4	watrix:	Biank: Equipmei	ıτ	
Parameter(s)	Method: EPA 5030C/EPA 8260D				Des	cription:	Equipment Valve				
1. Acetone							Prepara	ition	Ana	alysis	
\$ 2. Acrylonitrile U μg/L 1.0 1.0 0601122 V122F018 060222 00.46 V122F018 060222 00.46 V122F018 060222 00.46 V122F018 060222 00.46 V122F018 060222 00.46 V122F018 060222 00.46 V122F018 060222 00.46 V122F018 060222 00.46 V122F018 060222 00.46 V122F018 060222 00.46 V122F018 060222 00.46 V122F018 060222 00.46 V122F018 060222 00.46 V122F018 060222 00.46 V122F018 060222 00.46 V122F018 060222 00.46 V122F018 060222 00.46 V122F018 060222 00.46 V122F018 060222 00.46 V122F018 060222 00.46 V122F018 060222 00.46 V122F018 060222 00.46 V122F018 060222 00.46 V122F018 060222 00.46 V122F018 060222 00.46 V122F018 060222 00.46 V122F018 060222 00.46 V122F018 060222 00.46 V122F018 060222 00.46 V122F018 060222 00.46 V122F018 060222 00.46 V122F018 060222 00.46 V122F018 060222 00.46 V122F018 060222 00.46 V122F018 060222 00.46 V122F018 06022 00.46 V122F018 060222 00.46 V122F018 060222 00.46 V122F018 060222 00.46 V122F018 060222 00.46 V122F018 060222 00.46 V122F018 060222 00.46 V122F018 06022 00.46 V122F018 06022 00.46 V122F018 06022 00.46 V122F018 06022 00.46 V122F018 06022 00.46 V122F018 06022 00.46 V122F018 06022 00.46 V122F018 06022 00.46 V122F018 06022 00.46 V122F018 06022 00.46 V122F018 06022 00.46 V122F018 06022 00.46 V122F018 06022 00.46 V122F018 06022 00.46 V122F018 06022 00.46 V122F018 06022 00.46 V122F018 06022 00.46 V122F018 06022 00.46 V122F018 06022 00.46 V122F018 06022 00.46 V122F018 06022 00.46 V122F018 06022 00.46 V122F018 06022 00.46 V122F018 06022 00.46 V122F018 06022 00.46 V122F018 06022 00.46 V122F018 06022 00.46 V122F018 06022 00.46 V122F018 06022 00.46 V122F018 06022 00.46 V122F018 06022 00.46 V122F018 06022 00.46 V122F018 06022 00.46 V122F018 06022 00.46 V122F018 06022 00.46 V122F018 06022 00.46 V122F018 06022 00.46 V122F018 0602 00.46 V122F018 06022 00.46 V122F018 06022 00.46 V122F018 0602 00.46 V122F018 0602 00.46 V122F018 0602 00.46 V122F018 0602 00.46 V122F018 0602 00.46 V122F018 0602 00.46 V122F018 0602 00.46 V122F018 0602 00.46 V122F018 0602 00.46 V122F018 0602 00.46 V122F018 0602 00.46 V122F018 0602 00.46	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
3. Benzene U	1. Acetone	U	V+	μg/L	50	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
4. Bromobenzene U μg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 6. Bromochioromethane U μg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 7. Bromoform U μg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 8. Bromomethane U V+ μg/L 5.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 9.2-Butanone U V+ μg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 10.n-Butybenzene U μg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 11.s.carbon Totrachloride U μg/L 5.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 15. Chlorobenzene U μg/L 5.0 1.0	‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
5. Bromochloromethane U μg/L 1.0 1.0 0601/22 V122F018 66/02/22 00:46 V122F018 BRC 6. Bromodichloromethane U μg/L 1.0 1.0 0601/22 V122F018 0600/22 00:46 V122F018 BRC 7. Bromothm U μg/L 1.0 1.0 0601/22 V122F018 0600/22 00:46 V122F018 BRC 8. Bromomethane U γμg/L 5.0 1.0 0601/22 V122F018 0600/22 00:46 V122F018 BRC 9.2-Butanene U γμg/L 1.0 1.0 0601/22 V122F018 0602/22 00:46 V122F018 BRC 10Butybenzene U μg/L 1.0 1.0 0601/22 V122F018 0602/22 00:46 V122F018 BRC 12. tert-Butybenzene U μg/L 1.0 1.0 0601/22 V122F018 0602/22 00:46 V122F018 BRC 13. Carbon Disulfide U μg/L 5.0 1.0 0601/22 V122F018	3. Benzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
6. Bromodichloromethane U μg/L 1.0 1.0 06/01/22 V122F018 06/02/22 00:46 V122F018 BRC 7. Bromoform U μg/L 1.0 06/01/22 V122F018 06/02/22 00:46 V122F018 BRC 8. Bromomethane U γ μg/L 5.0 1.0 06/01/22 V122F018 06/02/22 00:46 V122F018 BRC 9.2-Butanone U γ μg/L 1.0 1.0 06/01/22 V122F018 06/02/22 00:46 V122F018 BRC 10	4. Bromobenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
7. Bromoform U µg/L 1.0 1.0 06/01/22 V12F01B 06/02/22 00:46 V12F01B BRC 8. Bromomethane U V+ µg/L 5.0 1.0 06/01/22 V12F01B 06/02/22 00:46 V12F01B BRC 9. 2-Butanone U V-y- µg/L 1.0 06/01/22 V12F01B 06/02/22 00:46 V12F01B BRC 10. n-Butylbenzene U µg/L 1.0 1.0 06/01/22 V12F01B 06/02/22 00:46 V12F01B BRC 11. sec-Butylbenzene U µg/L 1.0 1.0 06/01/22 V12F01B 06/02/22 00:46 V12F01B BRC 12. tert-Butylbenzene U µg/L 1.0 1.0 06/01/22 V12F01B 06/02/22 00:46 V12F01B BRC 12. tert-Butylbenzene U µg/L 1.0 1.0 06/01/22 V12F01B 06/02/22 00:46 V12F01B BRC 12. tert-Disorbenzene U µg/L 1.0 0.0 06/01/22	5. Bromochloromethane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
8. Bromomethane U V V	6. Bromodichloromethane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
	7. Bromoform	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
10. n-Butylbenzene	8. Bromomethane	U	L+	μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
11.sec-Butylbenzene	9. 2-Butanone	U	V+	μg/L	25	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
12. tert-Butylbenzene U μg/L 1.0 1.0 06/01/22 V122F018 06/02/22 00.46 V122F018 BRC 13. Carbon Disulfide U μg/L 5.0 1.0 06/01/22 V122F018 06/02/22 00.46 V122F018 BRC 14. Carbon Tetrachloride U μg/L 1.0 1.0 06/01/22 V122F018 06/02/22 00.46 V122F018 BRC 15. Chlorobenzene U μg/L 1.0 1.0 06/01/22 V122F018 06/02/22 00.46 V122F018 BRC 15. Chlorobethane U μg/L 5.0 1.0 06/01/22 V122F018 06/02/22 00.46 V122F018 BRC 16. Chloroethane U μg/L 1.0 1.0 06/01/22 V122F018 06/02/22 00.46 V122F018 BRC 17. Chloroform U μg/L 5.0 1.0 06/01/22 V122F018 06/02/22 00.46 V122F018 BRC 18. Chloromethane U μg/L 5.0 1.0 06/01/22 V122F018 06/02/22 00.46 V122F018 BRC 19. 2-Chlorotoluene U μg/L 5.0 1.0 06/01/22 V122F018 06/02/22 00.46 V122F018 BRC 19. 2-Chlorotoluene U μg/L 5.0 1.0 06/01/22 V122F018 06/02/22 00.46 V122F018 BRC 21. Dibromochloromethane U μg/L 5.0 1.0 06/01/22 V122F018 06/02/22 00.46 V122F018 BRC 21. Dibromochloromethane U μg/L 5.0 1.0 06/01/22 V122F018 06/02/22 00.46 V122F018 BRC 22. Dibromochloromethane U μg/L 5.0 1.0 06/01/22 V122F018 06/02/22 00.46 V122F018 BRC 23. 1,2-Dichlorobenzene U μg/L 1.0 1.0 06/01/22 V122F018 06/02/22 00.46 V122F018 BRC 24. 1,3-Dichlorobenzene U μg/L 1.0 1.0 06/01/22 V122F018 06/02/22 00.46 V122F018 BRC 25. 1,4-Dichlorobenzene U μg/L 1.0 1.0 06/01/22 V122F018 06/02/22 00.46 V122F018 BRC 25. 1,4-Dichlorobenzene U μg/L 1.0 1.0 06/01/22 V122F018 06/02/22 00.46 V122F018 BRC 27. 1,1-Dichlorobenzene U μg/L 1.0 1.0 06/01/22 V122F018 06/02/22 00.46 V122F018 BRC 27. 1,1-Dichlorobenzene U μg/L 1.0 1.0 06/01/22 V122F018 06/02/22 00.46 V122F018 BRC 27. 1,1-Dichlorobenzene U μg/L 1.0 1.0 06/01/22 V122F018 06/02/22 00.46 V122F018 BRC 27. 1,1-Dichlorobenzene U μg/L 1.0 1.0 06/01/22 V122F018 06/02/22 00.46 V122F018 BRC 27. 1,1-Dichlorobenzene U μg/L 1.0 1.0 06/01/22 V122F018 06/02/22 00.46 V122F018 BRC 27. 1,1-Dichlorobenzene U μg/L 1.0 1.0 06/01/22 V122F018 06/02/22 00.46 V122F018 BRC 27. 1,1-Dichlorobenzene U μg/L 1.0 1.0 06/01/22 V122F018 06/02/22 00.46 V122F018 BRC 31. trans-1,2-Dichlorobenzene U μg/L 1.0 1.0 06/	10. n-Butylbenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
13. Carbon Disulfide U μg/L 1.0 1.0 06/01/22 Vi22F01B 06/02/22 00:46 Vi22F01B BRC 14. Carbon Tetrachloride U μg/L 1.0 1.0 06/01/22 Vi22F01B 06/02/22 00:46 Vi22F01B BRC 15. Chlorobenzene U μg/L 1.0 1.0 06/01/22 Vi22F01B 06/02/22 00:46 Vi22F01B BRC 16. Chloroethane U μg/L 1.0 1.0 06/01/22 Vi22F01B 06/02/22 00:46 Vi22F01B BRC 17. Chloroform U μg/L 1.0 1.0 06/01/22 Vi22F01B 06/02/22 00:46 Vi22F01B BRC 18. Chloromethane U μg/L 1.0 1.0 06/01/22 Vi22F01B 06/02/22 00:46 Vi22F01B BRC 19. 2-Chlorotoluene U μg/L 1.0 1.0 06/01/22 Vi22F01B 06/02/22 00:46 Vi22F01B BRC 19. 2-Chlorotoluene U μg/L 1.0 1.0 06/01/22 Vi22F01B 06/02/22 00:46 Vi22F01B BRC 19. 2-Chlorotoluene U μg/L 1.0 1.0 06/01/22 Vi22F01B 06/02/22 00:46 Vi22F01B BRC 19. 2-Chloromethane U μg/L 1.0 1.0 06/01/22 Vi22F01B 06/02/22 00:46 Vi22F01B BRC 21. Dibromochloromethane U μg/L 1.0 1.0 06/01/22 Vi22F01B 06/02/22 00:46 Vi22F01B BRC 22. Dibromochloromethane U μg/L 1.0 1.0 06/01/22 Vi22F01B 06/02/22 00:46 Vi22F01B BRC 23. 1,2-Dichlorobenzene U μg/L 1.0 1.0 06/01/22 Vi22F01B 06/02/22 00:46 Vi22F01B BRC 24. 1,3-Dichlorobenzene U μg/L 1.0 1.0 06/01/22 Vi22F01B 06/02/22 00:46 Vi22F01B BRC 25. 1,4-Dichlorobenzene U μg/L 1.0 1.0 06/01/22 Vi22F01B 06/02/22 00:46 Vi22F01B BRC 26. Dichlorodifluoromethane U μg/L 1.0 1.0 06/01/22 Vi22F01B 06/02/22 00:46 Vi22F01B BRC 27. 1,1-Dichloroethane U μg/L 1.0 1.0 06/01/22 Vi22F01B 06/02/22 00:46 Vi22F01B BRC 28. 1,2-Dichloroethane U μg/L 1.0 1.0 06/01/22 Vi22F01B 06/02/22 00:46 Vi22F01B BRC 29. 1,1-Dichloroethane U μg/L 1.0 1.0 06/01/22 Vi22F01B 06/02/22 00:46 Vi22F01B BRC 29. 1,1-Dichloroethane U μg/L 1.0 1.0 06/01/22 Vi22F01B 06/02/22 00:46 Vi22F01B BRC 30. cis-1,2-Dichloroethane U μg/L 1.0 1.0 06/01/22 Vi22F01B 06/02/22 00:46 Vi22F01B BRC 31. trans-1,2-Dichloroethane U μg/L 1.0 1.0 06/01/22 Vi22F01B 06/02/22 00:46 Vi22F01B BRC 32. 1,2-Dichloroethane U μg/L 1.0 1.0 06/01/22 Vi22F01B 06/02/22 00:46 Vi22F01B BRC 31. trans-1,2-Dichloroethane U μg/L 1.0 1.0 06/01/22 Vi2	11. sec-Butylbenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
14. Carbon Tetrachloride U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 15. Chlorobenzene U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 16. Chloroethane U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 17. Chloroform U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 18. Chloromethane U µg/L 19. Chlorotoluene U µg/L 10. 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 19. 2-Chlorotoluene U µg/L 10. 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 19. 2-Chlorotoluene U µg/L 10. 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 20. 1,2-Dibromo-3-chloropropane (SIM) U µg/L 10. 0. 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 21. Dibromochloromethane U µg/L 10. 0. 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 22. Dibromomethane U µg/L 10. 0. 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 23. 1,2-Dichlorobenzene U µg/L 10. 0. 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 24. 1,3-Dichlorobenzene U µg/L 10. 0. 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 25. 1,4-Dichlorobenzene U µg/L 10. 0. 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 25. 1,4-Dichlorobenzene U µg/L 10. 0. 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 25. 1,4-Dichlorobenzene U µg/L 10. 0. 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 26. Dichlorodifluoromethane U µg/L 10. 0. 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 27. 1,1-Dichloroethane U µg/L 10. 0. 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 28. 1,2-Dichloroethane U µg/L 10. 0. 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 29. 1,1-Dichloroethane U µg/L 10. 0. 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 30. cis-1,2-Dichloroethene U µg/L 10. 0. 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 31. trans-1,2-Dichloroethene U µg/L 10. 0. 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 32. 1,2-Dichloroethene U µg/L 10. 0. 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 31. trans-1,3-Dichloropene U µg/L 10. 0. 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 32. 1,2-Dichloropene U µg/L 10. 0.	12. tert-Butylbenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
15. Chlorobenzene U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 16. Chloroethane U µg/L 5.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 17. Chloroform U µg/L 5.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 18. Chloromethane U µg/L 5.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 19. 2-Chlorotoluene U µg/L 5.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 20. 1,2-Dibromo-3-chloropropane (SIM) U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 21. Dibromochloromethane U µg/L 5.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 22. Dibromomethane U µg/L 5.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 22. Dibromomethane U µg/L 5.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 23. 1,2-Dichlorobenzene U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 24. 1,3-Dichlorobenzene U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 25. 1,4-Dichlorobenzene U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 25. 1,4-Dichlorobenzene U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 25. 1,4-Dichlorodethane U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 27. 1,1-Dichloroethane U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 28. 1,2-Dichloroethane U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 29. 1,1-Dichloroethane U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 29. 1,1-Dichloroethene U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 29. 1,1-Dichloroethene U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 29. 1,1-Dichloroethene U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 21. 2-Dichloroethene U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 21. 2-Dichloroethene U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 21. 2-Dichloroethene U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 21. 2-Dichloroethene U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 21. 2-Dichloroethene U µg/L 1.0 1.0 06/01/22 VI22F0	13. Carbon Disulfide	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
16. Chloroethane U µg/L 5.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 17. Chloroform U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 18. Chloromethane U µg/L 5.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 19. 2-Chlorotoluene U µg/L 5.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 19. 2-Chloromethane U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 21. Dibromochloromethane U µg/L 5.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 22. Dibromochloromethane U µg/L 5.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 22. Dibromochloromethane U µg/L 5.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 23. 1,2-Dichlorobenzene U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 24. 1,3-Dichlorobenzene U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 25. 1,4-Dichlorobenzene U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 25. 1,4-Dichlorobenzene U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 25. 1,4-Dichlorobenzene U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 25. 1,4-Dichlorobenzene U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 26. Dichlorodifluoromethane U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 27. 1,1-Dichlorobenzene U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 29. 1,1-Dichloroethane U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 29. 1,1-Dichloroethane U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 30. cis-1,2-Dichloroethene U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 31. 1,1-Dichloroethene U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 31. 1,1-Dichloroethene U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 31. 1,1-Dichloroethene U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 31. 1,1-Dichloropropene U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 31. 1,1-Dichloropropene U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 31. 1,1-Dichloropropene U µg/L	14. Carbon Tetrachloride	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
17. Chloroform U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 18. Chloromethane U µg/L 5.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 19. 2-Chlorotoluene U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 20. 1,2-Dibromo-3-chloropropane (SIM) U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 21. Dibromochloromethane U µg/L 5.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 22. Dibromomethane U µg/L 5.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 22. Dibromomethane U µg/L 5.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 23. 1,2-Dichlorobenzene U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 24. 1,3-Dichlorobenzene U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 25. 1,4-Dichlorobenzene U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 26. Dichlorodifluoromethane U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 27. 1,1-Dichloroethane U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 28. 1,2-Dichloroethane U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 29. 1,1-Dichloroethane U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 29. 1,1-Dichloroethane U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 30. cis-1,2-Dichloroethene U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 31. trans-1,2-Dichloroethene U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 32. 1,2-Dichloropropane U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 33. cis-1,3-Dichloropropane U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 34. trans-1,3-Dichloropropene U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 35. Ethylbenzene U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 36. Cis-1,2-Dichloropropene U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 37. Trans-1,3-Dichloropropene U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 38. Cis-1,2-Dic	15. Chlorobenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
18. Chloromethane U μg/L 5.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 19. 2-Chlorotoluene U μg/L 5.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 20. 1,2-Dibromo-3-chloropropane (SIM) U μg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 21. Dibromochloromethane U μg/L 5.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 22. Dibromomethane U μg/L 5.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 23. 1,2-Dichlorobenzene U μg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 24. 1,3-Dichlorobenzene U μg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 25. 1,4-Dichlorobenzene U μg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 25. 1,4-Dichlorobenzene U μg/L 5.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 25. 1,4-Dichlorobenzene U μg/L 5.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 25. 1,4-Dichloromethane U μg/L 5.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 27. 1,1-Dichloromethane U μg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 27. 1,1-Dichloroethane U μg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 28. 1,2-Dichloroethane U μg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 30. cis-1,2-Dichloroethene U μg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 30. cis-1,2-Dichloroethene U μg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 31. trans-1,2-Dichloroethene U μg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 31. trans-1,2-Dichloropropane U μg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 31. trans-1,2-Dichloropropane U μg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 31. trans-1,3-Dichloropropane U μg/L 0.50 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 31. trans-1,3-Dichloropropane U μg/L 0.50 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 33. trans-1,3-Dichloropropane U μg/L 0.50 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 33. trans-1,3-Dichloropropane U μg/L 0.50 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 33. trans-1,3-Dichloropropane U μg/L 0.50	16. Chloroethane	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
19.2-Chlorotoluene U µg/L 5.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 20.1,2-Dibromo-3-chloropropane (SIM) U µg/L 5.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 21. Dibromochloromethane U µg/L 5.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 22. Dibromomethane U µg/L 5.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 23. 1,2-Dichlorobenzene U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 24. 1,3-Dichlorobenzene U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 25. 1,4-Dichlorobenzene U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 26. Dichlorodifluoromethane U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 26. Dichlorodifluoromethane U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 27. 1,1-Dichloroethane U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 28. 1,2-Dichloroethane U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 29. 1,1-Dichloroethane U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 30. cis-1,2-Dichloroethene U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 31. trans-1,2-Dichloroethene U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 31. trans-1,2-Dichloroethene U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 32. 1,2-Dichloroethene U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 33. cis-1,3-Dichloropropene U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 33. cis-1,3-Dichloropropene U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 34. trans-1,3-Dichloropropene U µg/L 0.50 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 35. Ethylbenzene U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC	17. Chloroform	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
‡ 20.1,2-Dibromo-3-chloropropane (SIM) U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 21. Dibromochloromethane U µg/L 5.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 22. Dibromomethane U µg/L 5.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 23. 1,2-Dichlorobenzene U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 24. 1,3-Dichlorobenzene U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 25. 1,4-Dichlorobenzene U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 26. Dichlorodifluoromethane U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 27. 1,1-Dichloroethane U µg/L 1.0	18. Chloromethane	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
21. Dibromochloromethane U µg/L 5.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 22. Dibromomethane U µg/L 5.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 23. 1,2-Dichlorobenzene U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 24. 1,3-Dichlorobenzene U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 25. 1,4-Dichlorobenzene U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 26. Dichlorodifluoromethane U µg/L 5.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 27. 1,1-Dichloroethane U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 29. 1,1-Dichloroethane U µg/L 1.0 1.0<	19. 2-Chlorotoluene	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
22. Dibromomethane U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 23. 1,2-Dichlorobenzene U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 24. 1,3-Dichlorobenzene U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 25. 1,4-Dichlorobenzene U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 26. Dichlorodifluoromethane U µg/L 5.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 27. 1,1-Dichloroethane U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 28. 1,2-Dichloroethane U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 29. 1,1-Dichloroethene U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 30. cis-1,2-Dichloroethene U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 31. trans-1,2-Dichloroethene U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 32. 1,2-Dichloroethene U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 32. 1,2-Dichloroethene U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 33. cis-1,3-Dichloropropene U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 33. cis-1,3-Dichloropropene U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 34. trans-1,3-Dichloropropene U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 35. Ethylbenzene U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 36. Ethylbenzene	‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
23.1,2-Dichlorobenzene U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 24.1,3-Dichlorobenzene U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 25.1,4-Dichlorobenzene U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 26. Dichlorodifluoromethane U µg/L 27.1,1-Dichloroethane U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 27.1,1-Dichloroethane U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 28.1,2-Dichloroethane U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 29.1,1-Dichloroethane U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 30. cis-1,2-Dichloroethene U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 31. trans-1,2-Dichloroethene U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 32.1,2-Dichloroethene U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 33. 1,2-Dichloropropane U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 33. cis-1,3-Dichloropropane U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 33. cis-1,3-Dichloropropene U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 34. trans-1,3-Dichloropropene U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 35. Ethylbenzene U µg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC	21. Dibromochloromethane	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
24.1,3-Dichlorobenzene U μg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 25.1,4-Dichlorobenzene U μg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 26. Dichlorodifluoromethane U μg/L 5.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 27. 1,1-Dichloroethane U μg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 28. 1,2-Dichloroethane U μg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 29. 1,1-Dichloroethane U μg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 30. cis-1,2-Dichloroethane U μg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 31. trans-1,2-Dichloroethane U μg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC	22. Dibromomethane	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
25. 1,4-Dichlorobenzene U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 26. Dichlorodifluoromethane U µg/L 5.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 27. 1,1-Dichloroethane U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 28. 1,2-Dichloroethane U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 29. 1,1-Dichloroethane U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 30. cis-1,2-Dichloroethene U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 31. trans-1,2-Dichloroethene U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 32. 1,2-Dichloroethene U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 32. 1,2-Dichloropropane U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 33. cis-1,3-Dichloropropane U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 33. cis-1,3-Dichloropropene U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 34. trans-1,3-Dichloropropene U µg/L 0.50 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 34. trans-1,3-Dichloropropene U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 35. Ethylbenzene U µg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC	23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
26. Dichlorodifluoromethane U μg/L 5.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 27.1,1-Dichloroethane U μg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 28.1,2-Dichloroethane U μg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 29.1,1-Dichloroethene U μg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 30. cis-1,2-Dichloroethene U μg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 31. trans-1,2-Dichloroethene U μg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 32.1,2-Dichloroethene U μg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 33. cis-1,3-Dichloropropane U μg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 33. cis-1,3-Dichloropropene U μg/L 0.50 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 34. trans-1,3-Dichloropropene U μg/L 0.50 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 35. Ethylbenzene U μg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 35. Ethylbenzene	24.1,3-Dichlorobenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
27.1,1-Dichloroethane U μg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 28.1,2-Dichloroethane U μg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 29.1,1-Dichloroethene U μg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 30. cis-1,2-Dichloroethene U μg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 31. trans-1,2-Dichloroethene U μg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 32. 1,2-Dichloropropane U μg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 33. cis-1,3-Dichloropropene U μg/L 0.50 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 34. trans-1,3-Dichloropropene U μg/L 0.50 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC <td>25. 1,4-Dichlorobenzene</td> <td>U</td> <td></td> <td>μg/L</td> <td>1.0</td> <td>1.0</td> <td>06/01/22</td> <td>VI22F01B</td> <td>06/02/22 00:46</td> <td>VI22F01B</td> <td>BRC</td>	25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
28. 1,2-Dichloroethane U μg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 29. 1,1-Dichloroethene U μg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 30. cis-1,2-Dichloroethene U μg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 31. trans-1,2-Dichloroethene U μg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 32. 1,2-Dichloroptopane U μg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 33. cis-1,3-Dichloropropane U μg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 33. cis-1,3-Dichloropropene U μg/L 0.50 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 34. trans-1,3-Dichloropropene U μg/L 0.50 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 35. Ethylbenzene U μg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 35. Ethylbenzene	26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
29. 1,1-Dichloroethene U μg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 30. cis-1,2-Dichloroethene U μg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 31. trans-1,2-Dichloroethene U μg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 32. 1,2-Dichloropropane U μg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 33. cis-1,3-Dichloropropene U μg/L 0.50 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 34. trans-1,3-Dichloropropene U μg/L 0.50 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC 35. Ethylbenzene U μg/L 1.0 1.0 06/01/22 V122F01B 06/02/22 00:46 V122F01B BRC	27.1,1-Dichloroethane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
30. cis-1,2-Dichloroethene U μg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 31. trans-1,2-Dichloroethene U μg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 32. 1,2-Dichloropropane U μg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 33. cis-1,3-Dichloropropene U μg/L 0.50 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 34. trans-1,3-Dichloropropene U μg/L 0.50 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 35. Ethylbenzene U μg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC	28.1,2-Dichloroethane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
31. trans-1,2-Dichloroethene U μg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 32. 1,2-Dichloropropane U μg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 33. cis-1,3-Dichloropropene U μg/L 0.50 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 34. trans-1,3-Dichloropropene U μg/L 0.50 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 35. Ethylbenzene U μg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC	29. 1,1-Dichloroethene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
32.1,2-Dichloropropane U μg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 33. cis-1,3-Dichloropropene U μg/L 0.50 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 34. trans-1,3-Dichloropropene U μg/L 0.50 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 35. Ethylbenzene U μg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 35. Ethylbenzene	30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
33. cis-1,3-Dichloropropene U μg/L 0.50 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 34. trans-1,3-Dichloropropene U μg/L 0.50 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 35. Ethylbenzene U μg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 35. Ethylbenzene	31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
34. trans-1,3-Dichloropropene U μg/L 0.50 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 35. Ethylbenzene U μg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC 35. Ethylbenzene	32.1,2-Dichloropropane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
35. Ethylbenzene U μg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC	33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
,	34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
36. Ethylene Dibromide U μg/L 1.0 1.0 06/01/22 VI22F01B 06/02/22 00:46 VI22F01B BRC	35. Ethylbenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
	36. Ethylene Dibromide	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC

1914 Holloway Drive 11766 E Grand River 8660 S Madkinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368 F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584



Order: A08733 06/03/22 Date:

168189 Client Identification: Arcadis U.S., Inc. - Novi Sample Description: **Equipment Valve** Chain of Custody:

TRW Milford (30046730) 05/24/22 Client Project Name: Collect Date: Sample No:

Client Project No: 30046730 Sample Matrix: Blank: Equipment Collect Time: 15:30

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by	GC/MS			Aliq	uot ID:	A08733-004	Matrix:	Blank: Equipme	nt
Method: EPA 5030C/EPA 8260D				Des	cription:	Equipment Valve	•		
						Prepar	ation	An	alysis
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A.
37. 2-Hexanone	U		μg/L	50	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI2
38. Isopropylbenzene	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI2

						Prepara	ation	Ana	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
37. 2-Hexanone	U		μg/L	50	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
38. Isopropylbenzene	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
39. 4-Methyl-2-pentanone	U		μg/L	50	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
40. Methylene Chloride	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
‡ 41.2-Methylnaphthalene	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
42. MTBE	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
43. Naphthalene	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
44. n-Propylbenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
45. Styrene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
46. 1,1,1,2-Tetrachloroethane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
47.1,1,2,2-Tetrachloroethane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
48. Tetrachloroethene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
49. Toluene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
50. 1,2,4-Trichlorobenzene	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
51.1,1,1-Trichloroethane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
52.1,1,2-Trichloroethane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
53. Trichloroethene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
54. Trichlorofluoromethane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
55. 1,2,3-Trichloropropane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
56. 1,2,3-Trimethylbenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
57.1,2,4-Trimethylbenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
58. 1,3,5-Trimethylbenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
59. Vinyl Chloride	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
60. m&p-Xylene	U		μg/L	2.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
61. o-Xylene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC
62. Xylenes	U		μg/L	3.0	1.0	06/01/22	VI22F01B	06/02/22 00:46	VI22F01B	BRC



Order: A08733 Date: 06/03/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-02-07_75_80 Chain of Custody: 168189

Client Project Name: **TRW Milford (30046730)** Sample No: **5** Collect Date: **05/24/22**

A08733-005

Aliquot ID:

Matrix: Ground Water

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 16:20

Sample Comments:

Volatile Organic Compounds (VOCs) by GC/MS

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

volatile organic compounds (voos) by com								O. Cu		
Method: EPA 5030C/EPA 8260D				Des	cription:	VAP-02-07_75_80				
						Prepara	tion	Ana	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U	V+	μg/L	50	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BRC
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BRC
3. Benzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BRC
4. Bromobenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BRC
5. Bromochloromethane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BRC
6. Bromodichloromethane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BRC
7. Bromoform	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BRC
8. Bromomethane	U	V+ L+ ICV+	μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BRC
9. 2-Butanone	U	V+	μg/L	25	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BRC
10. n-Butylbenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BRC
11. sec-Butylbenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BRC
12. tert-Butylbenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BRC
13. Carbon Disulfide	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BRC
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BRC
15. Chlorobenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BRC
16. Chloroethane	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BRC
17. Chloroform	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BRC
18. Chloromethane	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BRC
19. 2-Chlorotoluene	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BRC
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BRC
21. Dibromochloromethane	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BRC
22. Dibromomethane	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BRC
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BRC
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BRC
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BRC
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BRC
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BRC
28. 1,2-Dichloroethane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BRC
29. 1,1-Dichloroethene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BRC
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BRC
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BRC
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BRC
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BRC
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BRC
35. Ethylbenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BRC
36. Ethylene Dibromide	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BRC

1914 Holloway Drive 11766 E Grand River 8660 S Madkinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368 F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584



Order: A08733 Date: 06/03/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-02-07_75_80 Chain of Custody: 168189

Client Project Name: TRW Milford (30046730) Sample No: 5 Collect Date: 05/24/22

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 16:20

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Aliquot ID: A08733-005 Matrix: Ground Water

Method: EPA 5030C/EPA 8260D Description: VAP-02-07_75_80

					Prepai	ration	Ana	alysis	
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init
37. 2-Hexanone	U	μg/L	50	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BR
38. Isopropylbenzene	U	μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BR
39. 4-Methyl-2-pentanone	U	μg/L	50	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BR
40. Methylene Chloride	U	μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BR
‡ 41.2-Methylnaphthalene	U	μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BR
42. MTBE	U	μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BR
43. Naphthalene	U	μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BR
44. n-Propylbenzene	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BR
45. Styrene	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BR
46.1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BR
47.1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BR
48. Tetrachloroethene	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BR
49. Toluene	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BR
50. 1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BR
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BR
‡ 52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BR
53. Trichloroethene	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BR
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BR
55. 1,2,3-Trichloropropane	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BR
‡ 56.1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BR
57.1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BR
58. 1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BR
59. Vinyl Chloride	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BR
60. m&p-Xylene	U	μg/L	2.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BR
61. o-Xylene	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BR
‡ 62. Xylenes	U	μg/L	3.0	1.0	06/01/22	VI22F01B	06/02/22 05:59	VI22F01B	BR



Order: A08733 Date: 06/03/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-02-08_85_90 Chain of Custody: 168189

Client Project Name: TRW Milford (30046730) Sample No: 6 Collect Date: 05/24/22

A08733-006

Aliquot ID:

Matrix: Ground Water

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 09:20

Sample Comments:

Volatile Organic Compounds (VOCs) by GC/MS

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

volatile Organic Compounds (VOCS) by GC/W	3			Aliq	uot iD:	AU0/33-UU0	watrix:	Ground water		
Method: EPA 5030C/EPA 8260D				Des	cription:	VAP-02-08_85_90				
						Prepara	tion	Ana	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U	V+	μg/L	50	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRC
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRC
3. Benzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRC
4. Bromobenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRC
5. Bromochloromethane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRC
6. Bromodichloromethane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRC
7. Bromoform	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRC
8. Bromomethane	U	V+ L+ ICV+	μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRC
9. 2-Butanone	U	V+	μg/L	25	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRC
10. n-Butylbenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRC
11. sec-Butylbenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRC
12. tert-Butylbenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRC
13. Carbon Disulfide	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRC
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRC
15. Chlorobenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRC
16. Chloroethane	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRC
17. Chloroform	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRC
18. Chloromethane	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRC
19. 2-Chlorotoluene	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRC
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRC
21. Dibromochloromethane	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRC
22. Dibromomethane	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRC
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRC
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRC
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRC
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRC
27. 1,1-Dichloroethane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRC
28. 1,2-Dichloroethane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRC
29. 1,1-Dichloroethene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRC
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRC
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRC
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRC
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRC
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRC
35. Ethylbenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRC
36. Ethylene Dibromide	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRC

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Order: A08733 Date: 06/03/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-02-08_85_90 Chain of Custody: 168189

Client Project Name: TRW Milford (30046730) Sample No: 6 Collect Date: 05/24/22

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 09:20

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Aliquot ID: A08733-006 Matrix: Ground Water

 Method: EPA 5030C/EPA 8260D
 Description:
 VAP-02-08_85_90

					Prepai			alysis	
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
37.2-Hexanone	U	μg/L	50	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRC
38. Isopropylbenzene	U	μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRC
39. 4-Methyl-2-pentanone	U	μg/L	50	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRO
40. Methylene Chloride	U	μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRO
\$41.2-Methylnaphthalene	U	μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRO
42. MTBE	U	μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRO
43. Naphthalene	U	μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRO
44. n-Propylbenzene	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRO
45. Styrene	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRO
46. 1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BR
47.1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRO
48. Tetrachloroethene	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BR
49. Toluene	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BR
50. 1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BR
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BR
52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRO
53. Trichloroethene	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRO
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BR
55. 1,2,3-Trichloropropane	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRO
56. 1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BR
57.1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRO
58. 1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BR
59. Vinyl Chloride	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRO
60. m&p-Xylene	U	μg/L	2.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BR
61. o-Xylene	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRO
‡ 62. Xylenes	U	μg/L	3.0	1.0	06/01/22	VI22F01B	06/02/22 06:26	VI22F01B	BRO



Order: A08733 Date: 06/03/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-02-09_95_100 Chain of Custody: 168189

Client Project Name: TRW Milford (30046730) Sample No: 7 Collect Date: 05/25/22

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 11:15

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Aliquot ID: A08733-007 Matrix: Ground Water

Method: EPA 5030C/EPA 8260D Description: VAP-02-09_95_100

						Prepar	ation	Ana	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	In
1. Acetone	U	V+	μg/L	50	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	SN
2. Acrylonitrile	U		μg/L	2.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	12
3. Benzene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	12
4. Bromobenzene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	S
5. Bromochloromethane	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	S
6. Bromodichloromethane	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	S
7. Bromoform	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	S
8. Bromomethane	U	ICV+	μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	S
9. 2-Butanone	U		μg/L	25	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	S
10. n-Butylbenzene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	S
11. sec-Butylbenzene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	S
12. tert-Butylbenzene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	S
13. Carbon Disulfide	U		μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	S
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	5
15. Chlorobenzene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	5
16. Chloroethane	U		μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	,
17. Chloroform	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	,
18. Chloromethane	U		μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	,
19. 2-Chlorotoluene	U		μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	,
20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	,
21. Dibromochloromethane	U		μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	
22. Dibromomethane	U		μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	;
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	,
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	,
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	,
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	,
27. 1,1-Dichloroethane	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	,
28. 1,2-Dichloroethane	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	,
29. 1,1-Dichloroethene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	,
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	,
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	5
32. 1,2-Dichloropropane	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	;
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	5
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	5
35. Ethylbenzene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	5
36. Ethylene Dibromide	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	5
37.2-Hexanone	U		μg/L	50	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	5

1914 Holloway Drive 11766 E Grand River 8660 S Madkinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368 F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584



Order: A08733 Date: 06/03/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-02-09_95_100 Chain of Custody: 168189

Client Project Name: **TRW Milford (30046730)** Sample No: **7** Collect Date: **05/25/22**

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 11:15

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Aliquot ID: A08733-007 Matrix: Ground Water

Method: EPA 5030C/EPA 8260D Description: VAP-02-09_95_100

					Prepai	ration	Ana	alysis	
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	lnit.
38. Isopropylbenzene	U	μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	SNO
39. 4-Methyl-2-pentanone	U	μg/L	50	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	SNC
40. Methylene Chloride	U	μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	SNO
‡ 41.2-Methylnaphthalene	U	μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	SNO
42. MTBE	U	μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	SNO
43. Naphthalene	U	μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	SNO
44. n-Propylbenzene	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	SNO
45. Styrene	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	SNO
46. 1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	SNO
47.1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	SNO
48. Tetrachloroethene	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	SNO
49. Toluene	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	SNO
50. 1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	SNO
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	SNO
‡ 52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	SNO
53. Trichloroethene	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	SNO
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	SNO
55. 1,2,3-Trichloropropane	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	SNO
\$ 56.1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	SNO
57.1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	SNO
58.1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	SNO
59. Vinyl Chloride	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	SNO
60. m&p-Xylene	U	μg/L	2.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	SNO
61. o-Xylene	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	SNO
‡ 62. Xylenes	U	μg/L	3.0	1.0	06/02/22	VI22F02A	06/02/22 15:54	VI22F02A	SNO



Order: A08733 Date: 06/03/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-03-08_85_90 Chain of Custody: 168189

Client Project Name: TRW Milford (30046730) Sample No: 8 Collect Date: 05/25/22

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 09:45

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/	MS			Aliq	uot ID:	A08733-008	Matrix:	Ground Water		
Method: EPA 5030C/EPA 8260D				Desc	cription:	VAP-03-08_85_90				
						Prepara	ation	An	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U	V+	μg/L	50	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	BRC
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	BRC
3. Benzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	BRC
4. Bromobenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	BRC
5. Bromochloromethane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	BRC
6. Bromodichloromethane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	BRC
7. Bromoform	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	BRC
8. Bromomethane	U	V+ L+ ICV+	μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	BRC
9. 2-Butanone	U	V+	μg/L	25	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	BRC
10. n-Butylbenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	BRC
11. sec-Butylbenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	BRC
12. tert-Butylbenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	BRC
13. Carbon Disulfide	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	BRC
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	BRC
15. Chlorobenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	BRC
16. Chloroethane	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	BRC
17. Chloroform	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	BRC
18. Chloromethane	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	BRC
19. 2-Chlorotoluene	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	BRC
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	BRC
21. Dibromochloromethane	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	BRC
22. Dibromomethane	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	BRC
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	BRC
24.1,3-Dichlorobenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	BRC
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	BRC
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	BRC
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	BRC
28. 1,2-Dichloroethane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	BRC
29. 1,1-Dichloroethene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	BRC
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	BRC
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	BRC
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	BRC
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	BRC
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	BRC
35. Ethylbenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	BRC
36. Ethylene Dibromide	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	BRC

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Order: A08733 Date: 06/03/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-03-08_85_90 Chain of Custody: 168189

Client Project Name: TRW Milford (30046730) Sample No: 8 Collect Date: 05/25/22

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 09:45

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Aliquot ID: A08733-008 Matrix: Ground Water

 Method: EPA 5030C/EPA 8260D
 Description:
 VAP-03-08_85_90

WELLIOU. EFA 3030G/EFA 6200D	Description: VAF-03-00_03_90										
					Prepara	ation	Ana	alysis			
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	lni		
37.2-Hexanone	U	μg/L	50	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	BR		
38. Isopropylbenzene	U	μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	BR		
39. 4-Methyl-2-pentanone	U	μg/L	50	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	BR		
40. Methylene Chloride	U	μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	BF		
\$ 41.2-Methylnaphthalene	U	μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	BF		
42. MTBE	U	μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	BF		
43. Naphthalene	U	μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	BF		
44. n-Propylbenzene	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	В		
45. Styrene	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	ВІ		
46. 1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	В		
47. 1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	В		
48. Tetrachloroethene	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	В		
49. Toluene	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	ВІ		
50. 1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	В		
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	В		
52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	В		
53. Trichloroethene	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	ВІ		
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	ВІ		
55. 1,2,3-Trichloropropane	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	В		
56. 1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	В		
57. 1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	ВІ		
58. 1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	ВІ		
59. Vinyl Chloride	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	ВІ		
60. m&p-Xylene	U	μg/L	2.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	ВІ		
61. o-Xylene	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	ВІ		
‡ 62. Xylenes	U	μg/L	3.0	1.0	06/01/22	VI22F01B	06/02/22 07:17	VI22F01B	ВІ		



Order: A08733 Date: 06/03/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-03-09_95_100 Chain of Custody: 168189

Client Project Name: **TRW Milford (30046730)** Sample No: **9** Collect Date: **05/25/22**

A08733-009

Aliquot ID:

Matrix: Ground Water

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 11:35

Sample Comments:

Volatile Organic Compounds (VOCs) by GC/MS

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

volatile Organic Compounds (vocs) by GC/	113			Aliq	uot iD:	AU0733-UU9	watrix:	Ground water		
Method: EPA 5030C/EPA 8260D				Des	cription:	VAP-03-09_95_100)			
						Prepara	ion	Ana	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U	V+	μg/L	50	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BRC
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BRC
3. Benzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BRC
4. Bromobenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BRC
5. Bromochloromethane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BRC
6. Bromodichloromethane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BRC
7. Bromoform	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BRC
8. Bromomethane	U	V+ L+ ICV+	μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BRC
9. 2-Butanone	U	V+	μg/L	25	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BRC
10. n-Butylbenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BRC
11. sec-Butylbenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BRC
12. tert-Butylbenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BRC
13. Carbon Disulfide	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BRC
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BRC
15. Chlorobenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BRC
16. Chloroethane	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BRC
17. Chloroform	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BRC
18. Chloromethane	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BRC
19. 2-Chlorotoluene	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BRC
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BRC
21. Dibromochloromethane	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BRC
22. Dibromomethane	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BRC
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BRC
24.1,3-Dichlorobenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BRC
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BRC
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BRC
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BRC
28. 1,2-Dichloroethane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BRC
29. 1,1-Dichloroethene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BRC
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BRC
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BRC
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BRC
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BRC
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BRC
35. Ethylbenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BRC
36. Ethylene Dibromide	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BRC

1914 Holloway Drive 11766 E Grand River 8660 S Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368 F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584



Order: A08733 Date: 06/03/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-03-09_95_100 Chain of Custody: 168189

Client Project Name: TRW Milford (30046730) Sample No: 9 Collect Date: 05/25/22

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 11:35

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Aliquot ID: A08733-009 Matrix: Ground Water

Method: EPA 5030C/EPA 8260D Description: VAP-03-09_95_100

WELLIOU. EFA 3030G/EFA 0200D	Description: VAF-03-03_100										
					Prepara	ition	An	alysis			
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init		
37.2-Hexanone	U	μg/L	50	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BR		
38. Isopropylbenzene	U	μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BR		
39. 4-Methyl-2-pentanone	U	μg/L	50	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BR		
40. Methylene Chloride	U	μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BR		
‡ 41.2-Methylnaphthalene	U	μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BR		
42. MTBE	U	μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BR		
43. Naphthalene	U	μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BR		
44. n-Propylbenzene	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BR		
45. Styrene	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BR		
46. 1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BR		
47.1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BR		
48. Tetrachloroethene	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BR		
49. Toluene	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BR		
50.1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BR		
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BR		
‡ 52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BR		
53. Trichloroethene	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BR		
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BR		
55.1,2,3-Trichloropropane	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BR		
‡ 56.1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BR		
57.1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BR		
58.1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BR		
59. Vinyl Chloride	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BR		
60. m&p-Xylene	U	μg/L	2.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BR		
61. o-Xylene	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BR		
‡ 62. Xylenes	U	μg/L	3.0	1.0	06/01/22	VI22F01B	06/02/22 07:43	VI22F01B	BR		



Order: A08733 Date: 06/03/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Duplicate 3 Chain of Custody: 168189

Client Project Name: TRW Milford (30046730) Sample No: 10 Collect Date: 05/25/22

A08733-010

Aliquot ID:

Matrix: Ground Water

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: NA

Sample Comments:

Volatile Organic Compounds (VOCs) by GC/MS

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

volatile Organic Compounds (VOCs) by GC/N	13			Allq	uot iD:	AU6/33-U1U	Wali IX.	Ground water		
Method: EPA 5030C/EPA 8260D				Des	cription:	Duplicate 3				
						Prepar	ation	Ana	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U	V+	μg/L	50	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
3. Benzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
4. Bromobenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
5. Bromochloromethane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
6. Bromodichloromethane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
7. Bromoform	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
8. Bromomethane	U	V+ L+ ICV+	μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
9. 2-Butanone	U	V+	μg/L	25	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
10. n-Butylbenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
11. sec-Butylbenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
12. tert-Butylbenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
13. Carbon Disulfide	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
15. Chlorobenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
16. Chloroethane	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
17. Chloroform	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
18. Chloromethane	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
19. 2-Chlorotoluene	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
21. Dibromochloromethane	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
22. Dibromomethane	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
29.1,1-Dichloroethene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
35. Ethylbenzene	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
36. Ethylene Dibromide	U		μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC

1914 Holloway Drive 11766 E Grand River 8660 S Madinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368 F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584



Order: A08733 Date: 06/03/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Duplicate 3 Chain of Custody: 168189

Client Project Name: TRW Milford (30046730) Sample No: 10 Collect Date: 05/25/22

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: NA

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

olatile Organic Compounds (VOCs) by GC/MS			Alic	quot ID:	A08733-010	Matrix: Ground Water			
Method: EPA 5030C/EPA 8260D			Des	scription:	Duplicate 3				
					Prepa	ration	An	alysis	
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
37. 2-Hexanone	U	μg/L	50	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
38. Isopropylbenzene	U	μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
39. 4-Methyl-2-pentanone	U	μg/L	50	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
40. Methylene Chloride	U	μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
‡ 41.2-Methylnaphthalene	U	μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
42. MTBE	U	μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
43. Naphthalene	U	μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
44. n-Propylbenzene	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
45. Styrene	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
46.1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
47.1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
48. Tetrachloroethene	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
49. Toluene	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
50. 1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
‡ 52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
53. Trichloroethene	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
55. 1,2,3-Trichloropropane	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
‡ 56.1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
57.1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
58. 1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
59. Vinyl Chloride	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
60. m&p-Xylene	U	μg/L	2.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
61. o-Xylene	U	μg/L	1.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC
‡ 62. Xylenes	U	μg/L	3.0	1.0	06/01/22	VI22F01B	06/02/22 08:10	VI22F01B	BRC



Order: Date:

Matrix: Ground Water

A08733 06/03/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-03-10_105_110 Chain of Custody: 171065

05/25/22 Client Project Name: TRW Milford (30046730) Collect Date: Sample No: 11

A08733-011

Aliquot ID:

Client Project No: 30046730 Sample Matrix: **Ground Water** Collect Time: 13:35

Sample Comments:

Volatile Organic Compounds (VOCs) by GC/MS

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

volune organic compounds (voos) by con				Allq	uoD.	7.007.00 011	man ix.	O. Curia Water		
Method: EPA 5030C/EPA 8260D				Des	cription:	VAP-03-10_105_1	110			
						Prepar	ation	Ana	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U	V+	μg/L	50	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BRC
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BRC
3. Benzene	U		μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BRC
4. Bromobenzene	U		μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BRC
5. Bromochloromethane	U		μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BRC
6. Bromodichloromethane	U		μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BRC
7. Bromoform	U		μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BRC
8. Bromomethane	U	V+ L+ ICV+	μg/L	5.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BRC
9. 2-Butanone	U	V+	μg/L	25	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BRC
10. n-Butylbenzene	U		μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BRC
11. sec-Butylbenzene	U		μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BRC
12. tert-Butylbenzene	U		μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BRC
13. Carbon Disulfide	U		μg/L	5.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BRC
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BRC
15. Chlorobenzene	U		μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BRC
16. Chloroethane	U		μg/L	5.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BRC
17. Chloroform	U		μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BRC
18. Chloromethane	U		μg/L	5.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BRC
19. 2-Chlorotoluene	U		μg/L	5.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BRC
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BRC
21. Dibromochloromethane	U		μg/L	5.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BRC
22. Dibromomethane	U		μg/L	5.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BRC
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BRC
24.1,3-Dichlorobenzene	U		μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BRC
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BRC
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BRC
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BRC
28. 1,2-Dichloroethane	U		μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BRC
29.1,1-Dichloroethene	U		μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BRC
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BRC
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BRC
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BRC
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BRC
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BRC
35. Ethylbenzene	U		μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BRC
36. Ethylene Dibromide	U		μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BRC

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Order: A08733 06/03/22 Date:

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-03-10_105_110 Chain of Custody: 171065

05/25/22 Client Project Name: TRW Milford (30046730) Collect Date: Sample No: 11

Description: VAP-03-10_105_110

Client Project No: 30046730 Sample Matrix: **Ground Water** Collect Time: 13:35

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Matrix: Ground Water** Aliquot ID: A08733-011 Method: EPA 5030C/EPA 8260D

					Prepa	ration	An	alysis	
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	lnit.
37.2-Hexanone	U	μg/L	50	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BRO
38. Isopropylbenzene	U	μg/L	5.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BRO
39. 4-Methyl-2-pentanone	U	μg/L	50	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BRO
40. Methylene Chloride	U	μg/L	5.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BRO
‡ 41.2-Methylnaphthalene	U	μg/L	5.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BRO
42. MTBE	U	μg/L	5.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BRO
43. Naphthalene	U	μg/L	5.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BRO
44. n-Propylbenzene	U	μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BR
45. Styrene	U	μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BR
46.1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BR
47.1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BR
48. Tetrachloroethene	U	μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BR
49. Toluene	1.0	μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BR
50.1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BR
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BR
52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BR
53. Trichloroethene	U	μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BR
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BR
55.1,2,3-Trichloropropane	U	μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BR
\$ 56.1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BR
57.1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BR
58.1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BR
59. Vinyl Chloride	U	μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BRO
60. m&p-Xylene	U	μg/L	2.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BRO
61. o-Xylene	U	μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BRO
‡ 62. Xylenes	U	μg/L	3.0	1.0	06/02/22	VI22F01B	06/02/22 08:36	VI22F01B	BRO



Order: A08733 Date: 06/03/22

Analysis

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-02-10_105_110 Chain of Custody: 171065

Client Project Name: TRW Milford (30046730) Sample No: 12 Collect Date: 05/25/22

Aliquot ID:

A08733-012

Preparation

Description: VAP-02-10_105_110

Matrix: Ground Water

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 13:50

Sample Comments:

Volatile Organic Compounds (VOCs) by GC/MS

Method: EPA 5030C/EPA 8260D

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

						i icpai			uryoro	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U	V+	μg/L	50	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BRC
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BRC
3. Benzene	U		μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BRC
4. Bromobenzene	U		μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BRC
5. Bromochloromethane	U		μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BRC
6. Bromodichloromethane	U		μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BRC
7. Bromoform	U		μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BRC
8. Bromomethane	U	V+ L+ ICV+	μg/L	5.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BRC
9. 2-Butanone	U	V+	μg/L	25	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BRC
10. n-Butylbenzene	U		μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BRC
11. sec-Butylbenzene	U		μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BRC
12. tert-Butylbenzene	U		μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BRC
13. Carbon Disulfide	U		μg/L	5.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BRC
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BRC
15. Chlorobenzene	U		μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BRC
16. Chloroethane	U		μg/L	5.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BRC
17. Chloroform	U		μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BRC
18. Chloromethane	U		μg/L	5.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BRC
19. 2-Chlorotoluene	U		μg/L	5.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BRC
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BRC
21. Dibromochloromethane	U		μg/L	5.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BRC
22. Dibromomethane	U		μg/L	5.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BRC
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BRC
24.1,3-Dichlorobenzene	U		μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BRC
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BRC
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BRC
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BRC

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μg/L

μg/L

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F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584

VI22F01B 06/02/22 09:02 VI22F01B BRC

VI22F01B 06/02/22 09:02 VI22F01B BRC

VI22F01B 06/02/22 09:02 VI22F01B BRC

06/02/22 09:02

06/02/22 09:02

06/02/22 09:02

VI22F01B 06/02/22 09:02 VI22F01B

06/02/22 09:02 VI22F01B BRC

06/02/22 09:02 VI22F01B BRC

Page:

VI22F01B

VI22F01B

VI22F01B

BRC

BRC

BRC

28. 1,2-Dichloroethane

29.1,1-Dichloroethene

30. cis-1,2-Dichloroethene

32. 1,2-Dichloropropane

36. Ethylene Dibromide

35. Ethylbenzene

31. trans-1,2-Dichloroethene

33. cis-1,3-Dichloropropene

34. trans-1,3-Dichloropropene

1.0

1.0

1.0

1.0

1.0

0.50

0.50

1.0

1.0

1.0

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06/02/22

VI22F01B

VI22F01B

VI22F01B

VI22F01B

VI22F01B



Order: A08733 Date: 06/03/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-02-10_105_110 Chain of Custody: 171065

Client Project Name: **TRW Milford (30046730)** Sample No: **12** Collect Date: **05/25/22**

Description: VAP-02-10_105_110

Client Project No: 30046730 Sample Matrix: Ground Water Collect Time: 13:50

Sample Comments:

Method: EPA 5030C/EPA 8260D

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Aliquot ID: A08733-012 Matrix: Ground Water

					Prepar	ation	Ana	alysis	
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
37.2-Hexanone	U	μg/L	50	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BRC
38. Isopropylbenzene	U	μg/L	5.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BRO
39. 4-Methyl-2-pentanone	U	μg/L	50	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BRO
40. Methylene Chloride	U	μg/L	5.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BRO
‡ 41.2-Methylnaphthalene	U	μg/L	5.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BRO
42.MTBE	U	μg/L	5.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BRO
43. Naphthalene	U	μg/L	5.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BRO
44. n-Propylbenzene	U	μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BRO
45. Styrene	U	μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BRO
46.1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BRO
47.1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BRO
48. Tetrachloroethene	U	μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BR
49. Toluene	U	μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BR
50.1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BR
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BR
52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BRO
53. Trichloroethene	U	μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BRO
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BRO
55.1,2,3-Trichloropropane	U	μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BR
\$ 56.1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BR
57. 1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BRO
58. 1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BRO
59. Vinyl Chloride	U	μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BRO
60. m&p-Xylene	U	μg/L	2.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BRO
61. o-Xylene	U	μg/L	1.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BRO
‡ 62. Xylenes	U	μg/L	3.0	1.0	06/02/22	VI22F01B	06/02/22 09:02	VI22F01B	BRO



Analytical Laboratory Report Laboratory Project Number: A08733

Order: A08733 Date: 06/03/22

Definitions/ Qualifiers:

- A: Spike recovery or precision unusable due to dilution.
- **B:** The analyte was detected in the associated method blank.
- E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
- J: The concentration is an estimated value.
- M: Modified Method
- **U:** The analyte was not detected at or above the reporting limit.
- X: Matrix Interference has resulted in a raised reporting limit or distorted result.
- W: Results reported on a wet-weight basis.
- *: Value reported is outside QC limits

Exception Summary:

ICV+ : Recovery in the associated initial calibration verification sample exceeds the upper control limit. Results may be biased high.

L+ : Recovery in the associated laboratory sample (LCS) exceeds the upper control limit. Results may be biased high.
 V+ : Recovery in the associated continuing calibration verification sample (CCV) exceeds the upper control limit. Results may be biased high.

Analysis Locations:

All analyses performed in Holt.



Accreditation Number(s):

T104704518-19-8 (TX)



Order ID: A08733 Page: 1 of 11 06/03/22 Date:

EPA 8260D VI22F01B: Method Blank (MB) . \//22E04B MB 06/04/2022 22:E2 [\//22E04B]

Run Time: VI22F01B.MB 06/01/2022 23:53 [\	/I22F01B]			
	MB Result	MB MB RDL		
	(Qualifier		
Analyte	μg/L	μg/L		
Acetone	U	50		
Acrylonitrile	U	2.0		
Benzene	U	1.0		
Bromobenzene	U	1.0		
Bromochloromethane	U	1.0		
Bromodichloromethane	U	1.0		
Bromoform	U	1.0		
Bromomethane	U	5.0		
2-Butanone	U	25		
n-Butylbenzene	U	1.0		
sec-Butylbenzene	U	1.0		
tert-Butylbenzene	U	1.0		
Carbon Disulfide	U	5.0		
Carbon Tetrachloride	U	1.0		
Chlorobenzene	U	1.0		
Chloroethane	U	5.0		
Chloroform	U	1.0		
Chloromethane	U	5.0		
2-Chlorotoluene	U	5.0		
1,2-Dibromo-3-chloropropane (SIM)	U	1.0		
Dibromochloromethane	U	5.0		
Dibromomethane	U	5.0		
1,2-Dichlorobenzene	U	1.0		
1,3-Dichlorobenzene	U	1.0		
1,4-Dichlorobenzene	U	1.0		
Dichlorodifluoromethane	U	5.0		
1,1-Dichloroethane	U	1.0		
1,2-Dichloroethane	U	1.0		
1,1-Dichloroethene	U	1.0		
cis-1,2-Dichloroethene	U	1.0		
trans-1,2-Dichloroethene	U	1.0		
1,2-Dichloropropane	U	1.0		
cis-1,3-Dichloropropene	U	0.50		
	1914Hblloway Drive 11766E Gand Rver	Holt, MI 48842 Bighton, MI 48116	T: (517) 699-0345 T: (810) 220-3300	F: (517) 699-0388 F: (810) 220-3311

Cadillac, MI 49601

T: (231) 775-8368

F: (231) 775-8584

8660 S Madkinaw Trail



Order ID: A08733 Page: 2 of 11 Date: 06/03/22

VI22F01B: Method Blank (MB)

Run Time: VI22F01B.MB 06/01/2022 23:53 [VI22F01B]			
	MB Result	MB	MB RDL
		Qualifier	
Analyte	μg/L		μg/L
trans-1,3-Dichloropropene	U		0.50
Ethylbenzene	U		1.0
Ethylene Dibromide	U		1.0
2-Hexanone	U		50
Isopropylbenzene	U		5.0
4-Methyl-2-pentanone	U		50
Methylene Chloride	U		5.0
2-Methylnaphthalene	U		5.0
MTBE	U		5.0
Naphthalene	U		5.0
n-Propylbenzene	U		1.0
Styrene	U		1.0
1,1,1,2-Tetrachloroethane	U		1.0
1,1,2,2-Tetrachloroethane	U		1.0
Tetrachloroethene	U		1.0
Toluene	U		1.0
1,2,4-Trichlorobenzene	U		5.0
1,1,1-Trichloroethane	U		1.0
1,1,2-Trichloroethane	U		1.0
Trichloroethene	U		1.0
Trichlorofluoromethane	U		1.0
1,2,3-Trichloropropane	U		1.0
1,2,3-Trimethylbenzene	U		1.0
1,2,4-Trimethylbenzene	U		1.0
1,3,5-Trimethylbenzene	U		1.0
Vinyl Chloride	U		1.0
m&p-Xylene	U		2.0
o-Xylene	U		1.0
4-Bromofluorobenzene(S)	92		80-120
Dibromofluoromethane(S)	102		80-120
1,2-Dichloroethane-d4(S)	90		80-120
Toluene-d8(S)	98		80-120

1914 Holloway Drive 11766 E Gand River 8660 S Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368 F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584



Order ID: A08733 Page: 3 of 11 Date: 06/03/22

VI22F01B: Method Blank (MB)

Run Time: VI22F01B.MB 06/02/2022 00	:20 [VI22F01B]	
	MB Result	MB MB RDL
		Qualifier
Analyte	μg/L	μg/L
4-Bromofluorobenzene(S)	93	80-120
Dibromofluoromethane(S)	103	80-120
1,2-Dichloroethane-d4(S)	91	80-120
Toluene-d8(S)	97	80-120



Order ID: A08733 Page: 4 of 11 Date: 06/03/22

VI22F01B: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VI22F01B.LCS: 06/01/2022 21:43 [VI22F01B] VI22F01B.LCSD: 06/01/2022 22:09 [VI22F01B]												
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Am	ount			Qualifier	Spike Amount Result		Rec.	Qualifier			Qualifier
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
Acetone	50.0	36.2	72	54-140		50.0	35.2	70		3	20	
Acrylonitrile	50.0	47.8	96	70-130		50.0	47.0	94		2	20	
Benzene	50.0	45.5	91	80-120		50.0	47.8	96		5	20	
Bromobenzene	50.0	44.3	89	75-125		50.0	46.9	94		5	20	
Bromochloromethane	50.0	43.1	86	70-130		50.0	45.1	90		5	20	
Bromodichloromethane	50.0	43.7	87	75-120		50.0	45.2	90		3	20	
Bromoform	50.0	47.5	95	70-130		50.0	47.5	95		0	20	
Bromomethane	50.0	67.1	134	68-135		50.0	71.3	143	*	6	20	
2-Butanone	50.0	40.6	81	70-148		50.0	39.7	79		3	20	
n-Butylbenzene	50.0	52.7	105	70-133		50.0	56.9	114		8	20	
sec-Butylbenzene	50.0	48.5	97	70-125		50.0	52.0	104		7	20	
ert-Butylbenzene	50.0	47.7	95	70-130		50.0	51.7	103		8	20	
Carbon Disulfide	50.0	43.7	87	70-130		50.0	45.9	92		6	20	
Carbon Tetrachloride	50.0	42.5	85	70-130		50.0	45.3	91		7	20	
Chlorobenzene	50.0	46.6	93	80-120		50.0	48.4	97		4	20	
Chloroethane	50.0	47.2	94	61-130		50.0	50.1	100		6	20	
Chloroform	50.0	43.1	86	80-120		50.0	44.7	89		3	20	
Chloromethane	50.0	49.7	99	67-125		50.0	51.8	104		5	20	
2-Chlorotoluene	50.0	45.6	91	75-125		50.0	48.8	98		7	20	
1,2-Dibromo-3-chloropropane (SIM)	50.0	44.0	88	70-130		50.0	44.9	90		2	20	
Dibromochloromethane	50.0	43.8	88	70-130		50.0	45.4	91		3	20	
Dibromomethane	50.0	46.8	94	75-125		50.0	47.3	95		1	20	
1,2-Dichlorobenzene	50.0	47.5	95	70-120		50.0	49.6	99		4	20	
1,3-Dichlorobenzene	50.0	48.6	97	75-125		50.0	51.3	103		6	20	
1,4-Dichlorobenzene	50.0	45.9	92	75-125		50.0	47.9	96		4	20	
Dichlorodifluoromethane	50.0	41.9	84	70-136		50.0	44.4	89		6	20	
,1-Dichloroethane	50.0	43.3	87	70-130		50.0	45.6	91		4	20	
1,2-Dichloroethane	50.0	39.6	79	70-130		50.0	40.0	80		1	20	
1,1-Dichloroethene	50.0	39.5	79	78-120		50.0	42.2	84		6	20	
cis-1,2-Dichloroethene	50.0	41.8	84	70-125		50.0	43.8	88		5	20	
trans-1,2-Dichloroethene	50.0	44.2	88	70-130		50.0	46.0	92		4	20	
1,2-Dichloropropane	50.0	46.4	93	80-121		50.0	48.0	96		3	20	
cis-1,3-Dichloropropene	50.0	44.1	88	70-130		50.0	45.5	91		3	20	

1914 Holloway Drive 11766 E Grand River 8660 S Madkinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368 F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584

RSN: VI22F01B-221540603154303



Order ID: A08733 Page: 5 of 11 Date: 06/03/22

VI22F01B: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VI22F01B.LCS: 06/01/2022 21:43 [VI22F01B] VI22F01B.LCSD: 06/01/2022 22:09 [VI22F01B]												
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Ame	ount			Qualifier	Spike Amount Result		Rec.	Qualifier			Qualifie
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
rans-1,3-Dichloropropene	50.0	47.7	95	70-132		50.0	48.7	97		2	20	
Ethylbenzene	50.0	47.1	94	80-120		50.0	49.5	99		5	20	
Ethylene Dibromide	50.0	48.4	97	80-120		50.0	49.1	98		1	20	
2-Hexanone	50.0	40.0	80	70-130		50.0	39.9	80		0	20	
sopropylbenzene	50.0	48.1	96	75-125		50.0	50.8	102		6	20	
4-Methyl-2-pentanone	50.0	48.9	98	70-130		50.0	49.4	99		1	20	
Methylene Chloride	50.0	42.9	86	70-130		50.0	44.2	88		2	20	
2-Methylnaphthalene	50.0	43.4	87	70-130		50.0	45.9	92		6	20	
МТВЕ	50.0	44.3	89	70-125		50.0	44.9	90		1	20	
Naphthalene	50.0	48.1	96	70-130		50.0	49.6	99		3	20	
n-Propylbenzene	50.0	48.0	96	70-130		50.0	52.0	104		8	20	
Styrene	50.0	44.5	89	70-130		50.0	46.5	93		4	20	
,1,1,2-Tetrachloroethane	50.0	46.8	94	80-130		50.0	48.6	97		3	20	
1,1,2,2-Tetrachloroethane	50.0	54.0	108	70-130		50.0	56.0	112		4	20	
Tetrachloroethene	50.0	47.5	95	70-130		50.0	50.5	101		6	20	
Toluene	50.0	46.9	94	80-120		50.0	49.0	98		4	20	
1,2,4-Trichlorobenzene	50.0	48.7	97	70-130		50.0	51.0	102		5	20	
1,1,1-Trichloroethane	50.0	43.5	87	70-130		50.0	45.6	91		4	20	
1,1,2-Trichloroethane	50.0	46.8	94	75-125		50.0	47.5	95		1	20	
Trichloroethene	50.0	41.6	83	71-125		50.0	44.1	88		6	20	
Trichlorofluoromethane	50.0	44.1	88	70-133		50.0	47.1	94		7	20	
1,2,3-Trichloropropane	50.0	49.2	98	75-125		50.0	49.7	99		1	20	
1,2,3-Trimethylbenzene	50.0	46.1	92	70-130		50.0	49.1	98		6	20	
1,2,4-Trimethylbenzene	50.0	48.7	97	75-130		50.0	52.0	104		7	20	
1,3,5-Trimethylbenzene	50.0	48.1	96	75-130		50.0	51.5	103		7	20	
/inyl Chloride	50.0	48.2	96	74-125		50.0	51.8	104		8	20	
n&p-Xylene	100	94.4	94	75-130		100	98.9	99		5	20	
-Xylene	50.0	47.0	94	80-120		50.0	49.2	98		4	20	
4-Bromofluorobenzene(S)			98	80-120				99				
Dibromofluoromethane(S)			98	80-120				97				
1,2-Dichloroethane-d4(S)			85	80-120				85				
Toluene-d8(S)			98	80-120				98				

1914 Holloway Drive 11766 E Grand River 8660 S Madkinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368 F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584



Order ID: A08733
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Date: 06/03/22

VI22F01B: Laboratory Control Sample (LCS)

EPA 8260D

Run Time: VI22F01B.LCS: 06/01/2022 23:01 [VI22F01B]								
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS			
	Spike Amo	ount			Qualifier			
Analyte	μg/L	μg/L	%	%				
4-Bromofluorobenzene(S)			95	80-120				
Dibromofluoromethane(S)			101	80-120				
1,2-Dichloroethane-d4(S)			90	80-120				
Toluene-d8(S)			97	80-120				



Order ID: A08733 Page: 7 of 11 Date: 06/03/22

VI22F02A: Method Blank (MB)

Run Time: VI22F02A.MB 06/02/2022 12:51 [VI22F02A	٨]					
	MB Result	MB	MB RDL			
		Qualifier				
Analyte	μg/L		μg/L			
Acetone	U		50			
Acrylonitrile	U		2.0			
Benzene	U		1.0			
Bromobenzene	U		1.0			
Bromochloromethane	U		1.0			
Bromodichloromethane	U		1.0			
Bromoform	U		1.0			
Bromomethane	U		5.0			
2-Butanone	U		25			
n-Butylbenzene	U		1.0			
sec-Butylbenzene	U		1.0			
tert-Butylbenzene	U		1.0			
Carbon Disulfide	U		5.0			
Carbon Tetrachloride	U		1.0			
Chlorobenzene	U		1.0			
Chloroethane	U		5.0			
Chloroform	U		1.0			
Chloromethane	U		5.0			
2-Chlorotoluene	U		5.0			
1,2-Dibromo-3-chloropropane (SIM)	U		1.0			
Dibromochloromethane	U		5.0			
Dibromomethane	U		5.0			
1,2-Dichlorobenzene	U		1.0			
1,3-Dichlorobenzene	U		1.0			
1,4-Dichlorobenzene	U		1.0			
Dichlorodifluoromethane	U		5.0			
1,1-Dichloroethane	U		1.0			
1,2-Dichloroethane	U		1.0			
1,1-Dichloroethene	U		1.0			
cis-1,2-Dichloroethene	U		1.0			
trans-1,2-Dichloroethene	U		1.0			
1,2-Dichloropropane	U		1.0			
cis-1,3-Dichloropropene	U		0.50			
	1914Hblloway Driv	e	Holt, MI 48842	T: (517) 699-0345	F: (517) 699-0388	

8660 S Maddinaw Trail Cadillac, MI 49601 T: (231) 775-8368 F: (231) 775-8584

Brighton, MI 48116

11766 E Grand River

T: (810) 220-3300

F: (810) 220-3311

RSN: VI22F02A-221540603154303



Order ID: A08733 Page: 8 of 11 Date: 06/03/22

VI22F02A: Method Blank (MB)

MB Result	MD MD DDI
	MB MB RDL
	Qualifier
μg/L	μg/L
U	0.50
U	1.0
U	1.0
U	50
U	5.0
U	50
U	5.0
U	1.0
U	5.0
U	1.0
U	2.0
U	1.0
91	80-120
98	80-120
88	80-120
97	80-120
	U U U U U U U U U U U U U U U U U U U

1914 Holloway Drive 11766 E Gand River 8660 S Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order ID: A08733 Page: 9 of 11 Date: 06/03/22

VI22F02A: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VI22F02A.LCS: 06/02/2022 11:33	[VI22F02A] VI22F02	2A.LCSD: 06/02/20	22 11:59 [VI22F	-02AJ								
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Am	ount			Qualifier	Spike Amo	unt Result	Rec.	Qualifier			Qualifie
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
Acetone	50.0	32.8	66	54-140		50.0	32.0	64		3	20	
Acrylonitrile	50.0	46.1	92	70-130		50.0	45.3	91		1	20	
Benzene	50.0	46.9	94	80-120		50.0	45.2	90		4	20	
Bromobenzene	50.0	45.9	92	75-125		50.0	44.7	89		3	20	
Bromochloromethane	50.0	43.4	87	70-130		50.0	41.8	84		4	20	
Bromodichloromethane	50.0	44.5	89	75-120		50.0	43.7	87		2	20	
Bromoform	50.0	48.8	98	70-130		50.0	47.8	96		2	20	
Bromomethane	50.0	64.2	128	68-135		50.0	62.5	125		2	20	
2-Butanone	50.0	38.5	77	70-148		50.0	37.5	75		3	20	
n-Butylbenzene	50.0	58.4	117	70-133		50.0	55.8	112		4	20	
sec-Butylbenzene	50.0	52.5	105	70-125		50.0	50.2	100		5	20	
ert-Butylbenzene	50.0	51.3	103	70-130		50.0	48.7	97		6	20	
Carbon Disulfide	50.0	45.3	91	70-130		50.0	43.1	86		6	20	
Carbon Tetrachloride	50.0	45.3	91	70-130		50.0	44.5	89		2	20	
Chlorobenzene	50.0	49.4	99	80-120		50.0	47.6	95		4	20	
Chloroethane	50.0	46.8	94	61-130		50.0	45.2	90		4	20	
Chloroform	50.0	43.2	86	80-120		50.0	41.5	83		4	20	
Chloromethane	50.0	47.2	94	67-125		50.0	46.2	92		2	20	
2-Chlorotoluene	50.0	48.6	97	75-125		50.0	46.5	93		4	20	
1,2-Dibromo-3-chloropropane (SIM)	50.0	45.6	91	70-130		50.0	44.4	89		2	20	
Dibromochloromethane	50.0	45.5	91	70-130		50.0	44.9	90		1	20	
Dibromomethane	50.0	47.2	94	75-125		50.0	47.0	94		0	20	
1,2-Dichlorobenzene	50.0	49.8	100	70-120		50.0	48.5	97		3	20	
1,3-Dichlorobenzene	50.0	51.6	103	75-125		50.0	50.1	100		3	20	
1,4-Dichlorobenzene	50.0	48.9	98	75-125		50.0	47.1	94		4	20	
Dichlorodifluoromethane	50.0	45.5	91	70-136		50.0	43.5	87		4	20	
1,1-Dichloroethane	50.0	43.6	87	70-130		50.0	41.7	83		5	20	
1,2-Dichloroethane	50.0	40.1	80	70-130		50.0	39.5	79		1	20	
1,1-Dichloroethene	50.0	40.6	81	78-120		50.0	39.2	78		4	20	
cis-1,2-Dichloroethene	50.0	41.8	84	70-125		50.0	40.2	80		5	20	
rans-1,2-Dichloroethene	50.0	45.2	90	70-130		50.0	43.1	86		5	20	
1,2-Dichloropropane	50.0	46.8	94	80-121		50.0	45.8	92		2	20	
cis-1,3-Dichloropropene	50.0	45.9	92	70-130		50.0	45.4	91		1	20	

1914 Holloway Drive 11766 E Gand River 8660 S Madrinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order ID: A08733 Page: 10 of 11 Date: 06/03/22

VI22F02A: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VI22F02A.LCS: 06/02/2022 11:	-	A.LCSD: 06/02/20	22 11:59 [VI22F	-02A]								
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Amo	ount			Qualifier	Spike Amoun	t Result	Rec.	Qualifier			Qualifie
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
trans-1,3-Dichloropropene	50.0	49.6	99	70-132		50.0	48.8	98		1	20	
Ethylbenzene	50.0	50.2	100	80-120		50.0	47.8	96		4	20	
Ethylene Dibromide	50.0	49.5	99	80-120		50.0	49.3	99		0	20	
2-Hexanone	50.0	39.2	78	70-130		50.0	38.6	77		1	20	
Isopropylbenzene	50.0	51.5	103	75-125		50.0	49.5	99		4	20	
4-Methyl-2-pentanone	50.0	47.9	96	70-130		50.0	46.6	93		3	20	
Methylene Chloride	50.0	42.2	84	70-130		50.0	40.6	81		4	20	
2-Methylnaphthalene	50.0	45.2	90	70-130		50.0	45.0	90		0	20	
MTBE	50.0	42.9	86	70-125		50.0	42.3	85		1	20	
Naphthalene	50.0	49.6	99	70-130		50.0	49.0	98		1	20	
n-Propylbenzene	50.0	51.9	104	70-130		50.0	49.4	99		5	20	
Styrene	50.0	47.1	94	70-130		50.0	45.3	91		3	20	
1,1,1,2-Tetrachloroethane	50.0	49.0	98	80-130		50.0	47.5	95		3	20	
1,1,2,2-Tetrachloroethane	50.0	55.8	112	70-130		50.0	54.2	108		4	20	
Tetrachloroethene	50.0	53.5	107	70-130		50.0	50.4	101		6	20	
Toluene	50.0	48.7	97	80-120		50.0	46.9	94		3	20	
1,2,4-Trichlorobenzene	50.0	51.7	103	70-130		50.0	51.1	102		1	20	
1,1,1-Trichloroethane	50.0	44.7	89	70-130		50.0	42.8	86		3	20	
1,1,2-Trichloroethane	50.0	48.3	97	75-125		50.0	46.8	94		3	20	
Trichloroethene	50.0	44.5	89	71-125		50.0	42.7	85		5	20	
Trichlorofluoromethane	50.0	46.3	93	70-133		50.0	44.3	89		4	20	
1,2,3-Trichloropropane	50.0	49.2	98	75-125		50.0	47.5	95		3	20	
1,2,3-Trimethylbenzene	50.0	48.8	98	70-130		50.0	47.0	94		4	20	
1,2,4-Trimethylbenzene	50.0	52.2	104	75-130		50.0	50.2	100		4	20	
1,3,5-Trimethylbenzene	50.0	51.7	103	75-130		50.0	49.5	99		4	20	
Vinyl Chloride	50.0	50.0	100	74-125		50.0	47.5	95		5	20	
m&p-Xylene	100	101	101	75-130		100	96.1	96		5	20	
o-Xylene	50.0	49.1	98	80-120		50.0	47.8	96		2	20	
4-Bromofluorobenzene(S)			95	80-120				97				
Dibromofluoromethane(S)			94	80-120				94				
1,2-Dichloroethane-d4(S)			84	80-120				84				
Toluene-d8(S)			96	80-120				98				

1914 Holloway Drive 11766 E Gand River 8660 S Madrinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order ID: A08733 Page: 11 of 11 Date: 06/03/22

Definitions/ Qualifiers:

- U: The analyte was not detected at or above the Reporting Limit (RL).
- *: Value reported is outside QC limits

Exception Summary:

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

Report Generated By:

By Katherine Jones at 3:47 PM, Jun 03, 2022

RSN: VI22F02A-221540603154303



Analytical Laboratory

1914 Holloway Drive

Holf, MI 48842 Phone: 517 699 0345

email: lab@fibertec.us

Fax: 517 699 0388

8660 S. Mackinaw Trail Cadillac, MI 49601

> Phone: 231 775 8368 Fax: 231 775 8584

Industrial Hygiene Services, Inc.

1914 Holloway Drive Holf, MI 48842

Phone: 517 699 0345

Fax: 517 699 0382

email: asbestos@fibertecihs.com

Geoprobe

11766 E. Grand River Rd. Brighton, MI 48116 Phone: 810 220 3300

Fax: 810 220 3311

Chain of Custody # 168189

PAGE ____ of ___

Client Name: TRW Milford				PARAMETERS		Matrix Code Deliverables
Contact Person: John Mclanis, Christian Seille Project Name/ Number: 300 46736 The Mariford Email distribution list: John, Alchanis, Coarcadis-Coar	CODE				J.E	S Soil GW Ground Water Level 2 A Air SW Surface Water Level 3 O Oil WW Waste Water Level 4
Email distribution list: John. Actumis. Courcadis-Con	CORNER FOR	E KV	25		HOLD SAMPLE	P Wipe X Other: Specify EDD
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5/24 1400 2 VAP-03-06 65-70	ay ?	ζ	×			
5/24 1412 3 UAP-02-06-65-20	SUS	2	X			
5/24 1530 4 Egypnent Value	-	3	×			Lab DI Water
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Analytical Laboratory

1914 Holloway Drive Holt, MI 48842

8660 S. Mackinaw Trail Cadillac, MI 49601 Phone: 517 699 0345 Phone: 231 775 8368

Fax: 517 699 0388 email: lab@fibertec.us Fax: 231 775 8584

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Geoprobe

11766 E. Grand River Rd. Brighton, MI 48116

Phone: 810 220 3300 Fax: 810 220 3311

Chain of Custody #

Client Nam			1. Cford					PARAMETERS			Matrix Code Deliverables
Contact Pe	erson: Jel	in Mel	Inu, & Churstian Suichel								S Soil GW Ground Water Level 2
Project Nar	me/ Number:	300	46730								A Air Sw Surface Water Level 3
11	Jul M	Choro	1	CODE)						삘	O Oil Ww Waste Water Level 4
Email distrib	oution list:	60116	ar, Stich Concertis. Con	Ö		0				HOLD SAMPLE	P Wipe X Other: Specify EDD
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Purchase C	rder#			TRIX	00 %	3					
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Friday, June 3, 2022

Fibertec Project Number: A08739
Project Identification: KH Milford /
Submittal Date: 05/26/2022

Mr. Christian Seidel Arcadis U.S., Inc. - Novi 28550 Cabot Drive Suite 500 Novi, MI 48377

Dear Mr. Seidel,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

By Katherine Jones at 4:04 PM, Jun 03, 2022

For Daryl P. Strandbergh Laboratory Director

Enclosures



Order: A08739 Date: 06/03/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-02-11_115-120 Chain of Custody: 202784

Client Project Name: KH Milford Sample No: Collect Date: 05/25/22

Client Project No: NA Sample Matrix: Ground Water Collect Time: 17:15

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS	Aliquot ID:	A08739-001	Matrix: Ground Water
Method: EPA 5030C/EPA 8260D	Description:	VAP-02-11_115-120	

1. Acetone							Prepar			alysis	
2	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init
3. Benzene	1. Acetone	U	V+	μg/L	50	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SN
4. Bromobenzene U μg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 5. Bromochloromethane U μg/L 1.0 06/02/22 V122F02A 06/02/22 1:35 V122F02A 5. Bromochloromethane U μg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 1:35 V122F02A 5. Bromomethane U μg/L 5.0 1.0 06/02/22 V122F02A 06/02/22 1:35 V122F02A 5. Bromomethane U μg/L 5.0 1.0 06/02/22 V122F02A 06/02/22 1:35 V122F02A 5. 022F02A 5. 022F02	2. Acrylonitrile	U		μg/L	2.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SN
5. Fromochloromethane U μg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 1:35 V122F02A 6. Bromodichloromethane U μg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 1:35 V122F02A 6. Bromomethane U μg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 1:35 V122F02A 6. Bromomethane U μg/L 5.0 1.0 06/02/22 V122F02A 06/02/22 1:35 V122F02A 6. Bromomethane U μg/L 1.0 0.0 06/02/22 V122F02A 06/02/22 1:35 <	3. Benzene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SN
6. Bromodichloromethane U μg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 7. Bromoform U μg/L 1.0 06/02/22 V122F02A 06/02/22 21:35	4. Bromobenzene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SN
7. Bromoform U μg/L 1.0 0.6002/22 V122F02A 06002/22 21:35 V122F02A 8. Bromomethane U IVOV μg/L 5.0 1.0 06002/22 V122F02A 06002/22 21:35 V122F02A 06002	5. Bromochloromethane	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SN
8. Bromomethane U CV+ Lip/L 5.0 1.0 06/02/22 VIZEFOZA 06/02/22 21:35 VIZEFOZA 9.2 Edutanone U µg/L 2.5 1.0 06/02/22 VIZEFOZA 06/02/22 21:35 VIZEFOZA 8.0 2.0 9.2 Edutanone U µg/L 1.0 1.0 06/02/22 VIZEFOZA 06/02/22 21:35 VIZEFOZA 8.0 1.0 06/02/22 VIZEFOZA 06/02/22 21:35 VIZEFOZA 2.0 1.2 1.2 1.2 1.2 1.2 06/02/22 VIZEFOZA 06/02/22 21:35 VIZEFOZA 2.0 1.2 1.0 06/02/22 VIZEFOZA 06/02/22 21:35 VIZEFOZA 3.1 0.0 06/02/22 VIZEFOZA 06/02/22 21:35 VIZEFOZA 3.1 0.0 06/02/22 VIZEFOZA 06/02/22 21:35	6. Bromodichloromethane	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SN
9.2-Butanone U µg/L 25 1.0 06/02/22 VIZEFOZA 06/02/22 21:35 VIZEFOZA 10 RODZ 21:35 VIZEFOZA 10 RODZ 22 1:35 VIZEFOZA 12 RODZ 22 1:35 VIZEFOZA 10 RODZ 22 1:35 VIZEFOZA 10 RODZ 22 1:35 VIZEFOZA 10 RODZ 22 1:35 VIZEFOZA 10 RODZ 22 1:35 VIZEFOZA 10 RODZ 22 1:35 VIZEFOZA 10 RODZ 22 1:35 VIZEFOZA 10 RODZ 22 1:35 VIZEFOZA 10 RODZ 22 1:35 VIZEFOZA 10 RODZ 22 1:35 VIZEFOZA 10 RODZ 22 1:35 VIZEFOZA 10 RODZ 22 1:35 VIZEFOZA 10 RODZ 22 1:35 VIZEFOZA 10 RODZ 22 1:35 VIZEFOZA 10 RODZ 22 1:35 VIZEFOZA 10 RODZ 22 1:35 VIZEFOZA 10 RODZ 22 1:35 VIZEFOZA 10 RODZ 22 1:35 VIZEFOZA 10 RODZ 22 1:35 VIZEFOZA 10 RODZ 22 1:35	7. Bromoform	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SN
10. n-Butylbenzene U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 05 11. sec-Butylbenzene U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 05 12. tert-Butylbenzene U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 05 12. tert-Butylbenzene U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 05 13. Carbon Disulfide U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 05 14. Carbon Tetrachloride U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 05 15. Chlorobenzene U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 05 15. Chlorobenzene U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 05 16. Chlorobenzene U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 05 18. Chloromethane U µg/L 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 05 18. Chloromethane U µg/L 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 05 19. 2-Chlorobenzene U µg/L 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 05 19. 2-Chlorobenzene U µg/L 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 05 19. 2-Chlorobenzene U µg/L 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 05 19. 2-Chlorobenzene U µg/L 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 05 122F02A 06/02/22 21:35 V122F02A 8. Bromomethane	U	ICV+	μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SN	
11. sec-Butylbenzene U µg/L 1.0 1.0 06/02/22 Vi22F02A 06/02/22 21:35 Vi22F02A 12. Lert-Butylbenzene U µg/L 1.0 1.0 06/02/22 Vi22F02A 06/02/22 21:35 Vi22F02A 13. Carlon Disulfide U µg/L 1.0 1.0 06/02/22 Vi22F02A 06/02/22 21:35 Vi22F02A 14. Carbon Tetrachloride U µg/L 1.0 1.0 06/02/22 Vi22F02A 06/02/22 21:35 Vi22F02A 15. Chlorobenzene U µg/L 1.0 1.0 06/02/22 Vi22F02A 06/02/22 21:35 Vi22F02A 15. Chlorobenzene U µg/L 1.0 1.0 06/02/22 Vi22F02A 06/02/22 21:35 Vi22F02A 15. Chlorobenzene U µg/L 1.0 1.0 06/02/22 Vi22F02A 06/02/22 21:35 Vi22F02A 15. Chlorobenzene U µg/L 1.0 1.0 06/02/22 Vi22F02A 06/02/22 21:35 Vi22F02A 15. Chlorobenzene U µg/L 1.0 1.0 06/02/22 Vi22F02A 06/02/22 21:35 Vi22F02A 15. Chlorobenzene U µg/L 1.0 1.0 06/02/22 Vi22F02A 06/02/22 21:35 Vi22F02A 15. Chlorobenzene U µg/L 1.0 1.0 06/02/22 Vi22F02A 06/02/22 21:35 Vi22F02A 15. Chlorobenzene U µg/L 1.0 1.0 06/02/22 Vi22F02A 06/02/22 21:35 Vi22F02A 15. Chlorobenzene U µg/L 1.0 1.0 06/02/22 Vi22F02A 06/02/22 21:35 Vi22F02A 15. Chlorobenzene U µg/L 1.0 1.0 06/02/22 Vi22F02A 06/02/22 21:35 Vi22F02A 15. Chlorobenzene U µg/L 1.0 1.0 06/02/22 Vi22F02A 06/02/22 21:35 Vi22F02A 15. Chlorobenzene U µg/L 1.0 1.0 06/02/22 Vi22F02A 06/02/22 21:35 Vi22F02A 15. Chlorobenzene U µg/L 1.0 1.0 06/02/22 Vi22F02A 06/02/22 21:35 Vi22F02A 15. Chlorobenzene U µg/L 1.0 1.0 06/02/22 Vi22F02A 06/02/22 21:35 Vi22F02A 15. Chlorobenzene U µg/L 1.0 1.0 06/02/22 Vi22F02A 06/02/22 21:35 Vi22F02A 15. Chlorobenzene U µg/L 1.0 1.0 06/02/22 Vi22F02A 06/02/22 21:35 Vi22F02A 15. Chlorobenzene U µg/L 1.0 1.0 06/02/22 Vi22F02A 06/02/22 21:35 Vi22F02A 15. Chlorobenzene U µg/L 1.0 1.0 06/02/22 Vi22F02A 06/02/22 21:35 Vi22F02A 15. Chlorobenzene U µg/L 1.0 1.0 06/02/22 Vi22F02A 06/02/22 21:35 Vi22F02A 15. Chlorobenzene U µg/L 1.0 1.0 06/02/22 Vi22F02A 06/02/22 21:35 Vi22F02A 15. Chlorobenzene U µg/L 1.0 1.0 06/02/22 Vi22F02A 06/02/22 21:35 Vi22F02A 15. Chlorobenzene U µg/L 1.0 1.0 06/02/22 Vi22F02A 06/02/22 21:35 Vi22F02A 15. Chlorobenzene U µg/L 1.0 1.0 06/02/22 Vi22F02A 06/02/22 21:35 Vi22F02A 15.	9. 2-Butanone	U		μg/L	25	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SN
12. tert-Butylbenzene U μg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 13. Carbon Disulfide U μg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 14. Carbon Tetrachloride U μg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 15. Chlorobenzene U μg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 15. Chlorobenzene U μg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 15. Chlorobenzene U μg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 15. Chloromethane U μg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 15. Chloromethane U μg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 15. Chloromethane U μg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 15. Chloromethane U μg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 15. Chloromethane U μg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 15. Chloromethane U μg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 15. Chloromethane U μg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 15. Chloromethane U μg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 15. Chloromethane U μg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 15. Chloromethane U μg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 15. Chloromethane U μg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 15. Chloromethane U μg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 15. Chloromethane U μg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 15. Chloromethane U μg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 15. Chloromethane U μg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 15. Chloromethane U μg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 15. Chloromethane U μg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 15. Chloromethane U μg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 15. Chloromethane U μg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 15. Chloromethane U μg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 15. Chloromethane U μg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 1:35 V122F02A 15. Chl	10. n-Butylbenzene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SN
13. Carbon Disulfide U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 05/02/22 21:35 V122F02	11. sec-Butylbenzene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SN
14. Carbon Tetrachloride	12. tert-Butylbenzene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SN
15. Chlorobenzene	13. Carbon Disulfide	U		μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SN
16. Chloroethane U μg/L 5.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 18. Chloroform U μg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 18. Chloromethane U μg/L 5.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 19.2-Chlorotoluene U μg/L 5.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 19.2-Chlorotoluene U μg/L 5.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 19.2-Chloromethane U μg/L 5.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 19.2-Chloromethane U μg/L 5.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 19.2-Chloromethane U μg/L 5.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 19.2-Chloromethane U μg/L 5.0 1.0 06/02/22 VI22F02A 06/02/22 11:35 VI22F02A 19.2-Chloromethane U μg/L 5.0 1.0 06/02/22 VI22F02A 06/02/22 11:35 VI22F02A 19.2-Chloromethane U μg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 11:35 VI22F02A 19.2-Chloromethane U μg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 11:35 VI22F02A 19.2-Chloromethane U μg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 11:35 VI22F02A 19.2-Chloromethane U μg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 11:35 VI22F02A 19.2-Chloromethane U μg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 11:35 VI22F02A 19.2-Chloromethane U μg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 11:35 VI22F02A 19.2-Chloromethane U μg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 11:35 VI22F02A 19.2-Chloromethane U μg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 11:35 VI22F02A 19.2-Chloromethane U μg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 11:35 VI22F02A 19.2-Chloromethane U μg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 11:35 VI22F02A 19.2-Chloromethane U μg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 11:35 VI22F02A 19.2-Chloromethane U μg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 11:35 VI22F02A 19.2-Chloromethane U μg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 11:35 VI22F02A 19.2-Chloromethane U μg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 11:35 VI22F02A 19.2-Chloromethane U μg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 11:35 VI22F02A 19.2-Chloromethane U μg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 11:35 VI22F02A 19.2-Chloromethane U μg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 11:35 VI22F02A	14. Carbon Tetrachloride	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SN
17. Chloroform U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 18. Chloromethane U µg/L 5.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 19. 2-Chlorotoluene U µg/L 5.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 19. 2-Chlorotoluene U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 19. 2-Chloromethane U µg/L 5.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 19. 2-Chloromethane U µg/L 5.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 19. 2-Chloromethane U µg/L 5.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 19. 2-Chloromethane U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 19. 2-Chloromethane U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 19. 2-Chloromethane U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 19. 2-Chloromethane U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 19. 2-Chloromethane U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 19. 2-Chloromethane U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 19. 2-Chloromethane U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 19. 2-Chloromethane U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 19. 2-Chloromethane U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 19. 2-Chloromethane U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 19. 2-Chloromethane U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 19. 2-Chloromethane U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 19. 2-Chloromethane U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 19. 2-Chloromethane U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 19. 2-Chloromethane U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 19. 2-Chloromethane U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 19. 2-Chloromethane U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 19. 2-Chloromethane U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 19. 2-Chloromethane U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 19. 2-Chloromethane U µg/L 1.0 1.0 06/02/22 V122F02	15. Chlorobenzene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SN
18. Chloromethane U µg/L 5.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 25 19.2-Chlorotoluene U µg/L 5.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 25 19.2-Chlorotoluene U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 25 12. Dibromo-3-chloropropane (SIM) U µg/L 5.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 25 12. Dibromomethane U µg/L 5.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 25 12. Dibromomethane U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 25 12. Dibromomethane U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 25 12. Dibromomethane U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 25 12. Dibromomethane U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 25 12. Dibromomethane U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 25 12. Dibromomethane U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 25 12. Dibromomethane U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 25 12. Dibromomethane U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 25 12. Dibromomethane U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 25 12. Dibromomethane U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 25 12. Dibromomethane U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 25 12. Dibromomethane U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 25 12. Dibromomethane U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 25 12. Dibromomethane U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 25 12. Dibromomethane U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 25 12. Dibromomethane U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 25 12. Dibromomethane U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 25 12. Dibromomethane U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 25 12. Dibromomethane U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 25 12. Dibromomethane U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 25 12. Dibromomethane U µg/L 1.0 1.0 06/02/22 V122F02A 06/02	16. Chloroethane	U		μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SN
19.2-Chlorotoluene U µg/L 5.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 20.1,2-Dibromo-3-chloropropane (SIM) U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 20.1,2-Dibromo-3-chloropropane (SIM) U µg/L 5.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20.2 21:35 VI22F02A 20	17. Chloroform	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SN
20.1,2-Dibromo-3-chloropropane (SIM) U µg/L 5.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 22:05 VI22F02A 06/02/22 21:35 VI22F02A 22:05 VI22F02A 06/02/22 21:35 VI22F02A 22:05 VI22F02A 06/02/22 21:35 VI22F02A 23:1,2-Dichlorobenzene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 23:1,2-Dichlorobenzene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 24:1,3-Dichlorobenzene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25:1,4-Dichlorobenzene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25:1,4-Dichlorobenzene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25:1,4-Dichlorobenzene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25:1,4-Dichlorobenzene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25:1,4-Dichlorobenzene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25:1,4-Dichlorobenzene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25:1,4-Dichlorobenzene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25:1,4-Dichlorobenzene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25:1,4-Dichlorobenzene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25:1,4-Dichlorobenzene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25:1,4-Dichlorobenzene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25:1,4-Dichlorobenzene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25:1,4-Dichloropropene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25:1,4-Dichloropropene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25:1,4-Dichloropropene U µg/L 1.0 0.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25:1,4-Dichloropropene U µg/L 1.0 0.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25:1,4-Dichloropropene U µg/L 1.0 0.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25:1,4-Dichloropropene U µg/L 1.0 0.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25:1,4-Dichloropropene	18. Chloromethane	U		μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SN
21. Dibromochloromethane U µg/L 5.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 22. Dibromomethane U µg/L 5.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 23. 1,2-Dichlorobenzene U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 24. 1,3-Dichlorobenzene U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 25. 1,4-Dichlorobenzene U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 25. 1,4-Dichlorobenzene U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 25. 1,4-Dichlorobenzene U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 25. 1,4-Dichlorobenzene U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 25. 1,4-Dichlorobenzene U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 25. 1,2-Dichlorobenzene U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 25. 1,2-Dichlorobenzene U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 25. 1,2-Dichlorobenzene U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 25. 1,2-Dichlorobenzene U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 25. 1,2-Dichlorobenzene U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 25. 1,2-Dichloropropene U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 25. 1,2-Dichloropropene U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 25. 1,2-Dichloropropene U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 25. 1,2-Dichloropropene U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 25. 1,2-Dichloropropene U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 25. 1,2-Dichloropropene U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 25. 1,2-Dichloropropene U µg/L 1.0 1.0 06/02/22 V122F02A 06/02/22 21:35 V122F02A 25. 1,2-Dichloropropene	19. 2-Chlorotoluene	U		μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SN
22. Dibromomethane U µg/L 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 05/02/22 21:35 VI22F02A 05/0	20. 1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SI
23.1,2-Dichlorobenzene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 22.1;35 VI22F02A 23.1;35 VI22F02A 24.1;35-Dichlorobenzene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25.1;4-Dichlorobenzene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25.1;4-Dichlorobenzene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25.1;4-Dichlorodifluoromethane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25.1;4-Dichlorobenzene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25.1;4-Dichlorobenzene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25.1;4-Dichlorobenzene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25.1;4-Dichlorobenzene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25.1;4-Dichlorobenzene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25.1;4-Dichlorobenzene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25.1;4-Dichlorobenzene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25.1;4-Dichlorobenzene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25.1;4-Dichlorobenzene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25.1;4-Dichlorobenzene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25.1;4-Dichlorobenzene	21. Dibromochloromethane	U		μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SI
24.1,3-Dichlorobenzene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25.1,4-Dichlorobenzene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25.1,4-Dichlorobenzene U µg/L 5.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25.1,1-Dichloroethane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25.1,1-Dichloroethane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25.1,1-Dichloroethane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25.1,1-Dichloroethane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25.1,1-Dichloroethane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25.1,1-Dichloroethane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25.1,1-Dichloroethane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25.1,1-Dichloroethane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25.1,1-Dichloroethane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25.1,1-Dichloroethane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25.1,1-Dichloropropane U µg/L 0.50 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25.1,1-Dichloropropane U µg/L 0.50 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25.1,1-Dichloropropane U µg/L 0.50 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25.1,1-Dichloropropane U µg/L 0.50 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25.1,1-Dichloropropane U µg/L 0.50 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 25.1,1-Dichloropropane	22. Dibromomethane	U		μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SI
25. 1,4-Dichlorobenzene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 26. Dichlorodifluoromethane U µg/L 5.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 27. 1,1-Dichloroethane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 28. 1,2-Dichloroethane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 29. 1,1-Dichloroethane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 29. 1,1-Dichloroethane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 29. 1,1-Dichloroethane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 29. 1,1-Dichloroethane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 29. 1,1-Dichloroethane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 29. 1,1-Dichloroethane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 29. 1,1-Dichloroptopane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 29. 1,1-Dichloroptopane U µg/L 0.50 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 29. 1,1-Dichloroptopane U µg/L 0.50 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 29. 1,1-Dichloroptopane U µg/L 0.50 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 29. 1,1-Dichloroptopane U µg/L 0.50 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 29. 1,1-Dichloroptopane U µg/L 0.50 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 29. 1,1-Dichloroptopane U µg/L 0.50 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 29. 1,1-Dichloroptopane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 29. 1,1-Dichloroptopane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 29. 1,1-Dichloroptopane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 29. 1,1-Dichloroptopane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 29. 1,1-Dichloroptopane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 29. 1,1-Dichloroptopane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 29. 1,1-Dichloroptopane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 29. 1,1-Dichloroptopane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 29. 1,1-Dichloropto	23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SI
26. Dichlorodifluoromethane U µg/L 5.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 27.1,1-Dichloroethane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 28.1,2-Dichloroethane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 29.1,1-Dichloroethane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 29.1,1-Dichloroethane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 29.1,1-Dichloroethane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 29.1,1-Dichloroethane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 29.1,1-Dichloroethane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 29.1,1-Dichloroethane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 29.1,1-Dichloroptopane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 29.1,1-Dichloroptopane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 29.1,1-Dichloroptopane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 29.1,1-Dichloroptopane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 29.1,1-Dichloroptopane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 29.1,1-Dichloroptopane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 29.1,1-Dichloroptopane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 29.1,1-Dichloroptopane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 29.1,1-Dichloroptopane	24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SI
27.1,1-Dichloroethane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S 28.1,2-Dichloroethane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S 29.1,1-Dichloroethane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S 30. cis-1,2-Dichloroethane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S 31. trans-1,2-Dichloroethane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S 31. trans-1,2-Dichloroethane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S 32. 1,2-Dichloropropane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S 33. cis-1,3-Dichloropropane U µg/L 0.50 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S 34. trans-1,3-Dichloropropane U µg/L 0.50 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S 35. Ethylbenzene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S 36. Ethylpen Dibromide U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S	25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SI
28.1,2-Dichloroethane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 05/02/22 VI22F02A 05/02/22 21:35 VI22F02A 05/02/22 VI22F02A 05/02/22 21:35 VI22F02A 05/02/22 VI22F02A 05/02/22 21:35 VI22F02A 05/02/22 VI22F02A 05/02/22 21:35 VI22F02A 05/02/22 VI22F02A 05/02/22 21:35 VI22F02A 05/02/22 VI22F02A 05/02/22 VI22F02A 05/02/22 VI22F02A 05/02/22 VI22F02A 05/02/22 VI22F02A 05/02/22 VI22F02A 05/02/22 VI22F02A 05/02/22 VI22F02A 05/02/22 VI22F02A 05/02/22 VI22F02A 05/02/22 VI22F02A 05/02/22 VI22F02A 05/02/22 VI22F02A 05/02/22 VI22F02A 05/02/22 VI22F02	26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SI
29. 1,1-Dichloroethene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S 30. cis-1,2-Dichloroethene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S 31. trans-1,2-Dichloroethene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S 32. 1,2-Dichloropropane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S 33. cis-1,3-Dichloropropane U µg/L 0.50 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S 34. trans-1,3-Dichloropropene U µg/L 0.50 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S 35. Ethylbenzene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S 36. Ethylene Dibromide U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S	27. 1,1-Dichloroethane	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SI
30. cis-1,2-Dichloroethene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 03. cis-1,3-Dichloroethene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 03. cis-1,3-Dichloropropene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 03. cis-1,3-Dichloropropene U µg/L 0.50 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 03. cis-1,3-Dichloropropene U µg/L 0.50 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 03. cis-1,3-Dichloropropene U µg/L 0.50 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 03. cis-1,3-Dichloropropene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 03. cis-1,3-Dichloropropene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 03. cis-1,3-Dichloropropene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 03. cis-1,3-Dichloropropene	28. 1,2-Dichloroethane	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SI
31. trans-1,2-Dichloroethene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S 32. 1,2-Dichloropropane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S 33. cis-1,3-Dichloropropene U µg/L 0.50 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S 34. trans-1,3-Dichloropropene U µg/L 0.50 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S 35. Ethylbenzene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S 36. Ethylene Dibromide U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S	29. 1,1-Dichloroethene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SI
32.1,2-Dichloropropane U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S 33. cis-1,3-Dichloropropene U µg/L 0.50 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S 34. trans-1,3-Dichloropropene U µg/L 0.50 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S 35. Ethylbenzene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S 36. Ethylpen Dibromide U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S 36. Ethylpen Dibromide U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S 36. Ethylpen Dibromide U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S 36. Ethylpen Dibromide U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S 36. Ethylpen Dibromide U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S 36. Ethylpen Dibromide U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S 36. Ethylpen Dibromide U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S 36. Ethylpen Dibromide U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S 36. Ethylpen Dibromide U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S 36. Ethylpen Dibromide U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S 36. Ethylpen Dibromide U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S 36. Ethylpen Dibromide U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S 36. Ethylpen Dibromide U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 VI22F02A 06/02/22 VI22F02A S 36. Ethylpen Dibromide U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 VI22F02A 06/02/22 VI22F02A 06/02/22 VI22F02A 06/02/22 VI22F02A 06/02/22 VI22F02A 06/02/22 VI22F02A 06/02/22 VI22F02A 06/02/22 VI22F02A 06/02/22 VI22F02A 06/02/22 VI22F02A 06/02/22 VI22F02A 06/02/22 VI22F02A 06/02/22 VI22F02A 06/02/22 VI22F02A 06/02/22 VI22F02A 06/02/22 VI22F02A 06/02/22 VI22F02A 06/02/22 VI22F02A 06/02/22 VI22F02A 06/02/22 VI22F02A 06/02/22 VI22F02A 06/02/22 VI22F02A 06/02/22 VI22F02A 06/02/22 VI22F02A 06/02/22 VI22F02A 06/02/22 VI22F02A 06/02/22 VI22F02A 06/02/22 VI22F02A 06/02/22 VI22F02A 06/02/22 VI22F02A 06/02/22 VI22F02A 06/02/22 VI22F02A	30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SI
33. cis-1,3-Dichloropropene U μg/L 0.50 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S 34. trans-1,3-Dichloropropene U μg/L 0.50 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S 35. Ethylbenzene U μg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S 36. Ethylene Dibromide U μg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S 36. Ethylene Dibromide U μg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S 36. Ethylene Dibromide	31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SI
34. trans-1,3-Dichloropropene U µg/L 0.50 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 8 35. Ethylbenzene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 8 36. Ethylene Dibromide U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A 8	32. 1,2-Dichloropropane	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SI
35. Ethylbenzene U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S 36. Ethylene Dibromide U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S	33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SN
36. Ethylene Dibromide U µg/L 1.0 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S	34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SI
1 10 1 10 1	35. Ethylbenzene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SI
37.2-Hexanone U µg/L 50 1.0 06/02/22 VI22F02A 06/02/22 21:35 VI22F02A S	36. Ethylene Dibromide	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SN
	37. 2-Hexanone	U			50	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SN

1914 Holloway Drive 11766 E Grand River 8660 S Madkinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368 F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584

Page:



Order: A08739 Date: 06/03/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: VAP-02-11_115-120 Chain of Custody: 202784

Client Project Name: KH Milford Sample No: Collect Date: 05/25/22

Client Project No: NA Sample Matrix: Ground Water Collect Time: 17:15

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Aliquot ID: A08739-001 Matrix: Ground Water

Method: EPA 5030C/EPA 8260D Description: VAP-02-11_115-120

					Prepai	ration	Ana	alysis	
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	lnit.
38. Isopropylbenzene	U	μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SNO
39. 4-Methyl-2-pentanone	U	μg/L	50	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SNC
40. Methylene Chloride	U	μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SNC
‡ 41.2-Methylnaphthalene	U	μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SNO
42. MTBE	U	μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SNO
43. Naphthalene	U	μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SNO
44. n-Propylbenzene	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SNO
45. Styrene	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SNO
46.1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SNO
47.1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SNO
48. Tetrachloroethene	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SNO
49. Toluene	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SNO
50. 1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SNO
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SNO
‡ 52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SNO
53. Trichloroethene	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SNO
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SNO
55. 1,2,3-Trichloropropane	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SNO
‡ 56.1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SNO
57.1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SNO
58.1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SNO
59. Vinyl Chloride	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SNO
60. m&p-Xylene	U	μg/L	2.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SNO
61. o-Xylene	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SNO
‡ 62. Xylenes	U	μg/L	3.0	1.0	06/02/22	VI22F02A	06/02/22 21:35	VI22F02A	SNO

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A08739 Order: 06/03/22 Date:

Matrix: Blank: Equipment

Arcadis U.S., Inc. - Novi Chain of Custody: 202784 Client Identification: Sample Description: Equipment_Pump

Client Project Name: **KH Milford** Collect Date: 05/25/22 Sample No:

Aliquot ID:

A08739-002

Description: Equipment_Pump

Client Project No: NA Sample Matrix: Blank: Equipment Collect Time: 15:50

Sample Comments:

Volatile Organic Compounds (VOCs) by GC/MS

Method: EPA 5030C/EPA 8260D

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

						Prepar	ation	Ana	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init
1. Acetone	U	V+	μg/L	50	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	SN
2. Acrylonitrile	U		μg/L	2.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	SN
3. Benzene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	SN
4. Bromobenzene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	SN
5. Bromochloromethane	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	SN
6. Bromodichloromethane	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	12
7. Bromoform	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	SI
8. Bromomethane	U	ICV+	μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	12
9. 2-Butanone	U		μg/L	25	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	SN
10. n-Butylbenzene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	SI
11. sec-Butylbenzene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	SI
12. tert-Butylbenzene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	S
13. Carbon Disulfide	U		μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	S
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	S
15. Chlorobenzene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	S
16. Chloroethane	U		μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	S
17. Chloroform	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	S
18. Chloromethane	U		μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	S
19. 2-Chlorotoluene	U		μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	S
20. 1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	S
21. Dibromochloromethane	U		μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	S
22. Dibromomethane	U		μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	S
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	S
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	S
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	S
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	S
27. 1,1-Dichloroethane	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	S
28. 1,2-Dichloroethane	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	S
29. 1,1-Dichloroethene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	S
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	S
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	S
32. 1,2-Dichloropropane	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	S

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μg/L

μg/L

μg/L

μg/L

μg/L

U

U

U

U

U

T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368

1.0

1.0

1.0

1.0

1.0

06/02/22

06/02/22

06/02/22

06/02/22

06/02/22

VI22F02A

VI22F02A

F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584

VI22F02A 06/02/22 15:01

VI22F02A 06/02/22 15:01 VI22F02A SNC

VI22F02A 06/02/22 15:01 VI22F02A SNC

Page:

06/02/22 15:01

06/02/22 15:01

33. cis-1,3-Dichloropropene

35. Ethylbenzene

37.2-Hexanone

36. Ethylene Dibromide

34. trans-1,3-Dichloropropene

0.50

0.50

1.0

1.0

50

VI22F02A

VI22F02A

VI22F02A

SNC



Order: A08739 Date: 06/03/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Equipment_Pump Chain of Custody: 202784

Client Project Name: KH Milford Sample No: Collect Date: 05/25/22

Client Project No: NA Sample Matrix: Blank: Equipment Collect Time: 15:50

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS

Aliquot ID: A08739-002 Matrix: Blank: Equipment

Method: EPA 5030C/EPA 8260D

Description: Equipment_Pump

					Prepar	ation	An	alysis	
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
38. Isopropylbenzene	U	μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	SNC
39. 4-Methyl-2-pentanone	U	μg/L	50	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	SNC
40. Methylene Chloride	U	μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	SNC
‡ 41.2-Methylnaphthalene	U	μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	SNC
42. MTBE	U	μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	SNC
43. Naphthalene	U	μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	SNC
44. n-Propylbenzene	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	SNC
45. Styrene	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	SNC
46. 1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	SNC
47.1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	SNC
48. Tetrachloroethene	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	SNC
49. Toluene	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	SNC
50. 1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	SNC
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	SNC
‡ 52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	SNC
53. Trichloroethene	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	SNC
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	SNC
55. 1,2,3-Trichloropropane	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	SNC
‡ 56.1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	SNC
57.1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	SNC
58. 1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	SNC
59. Vinyl Chloride	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	SNC
60. m&p-Xylene	U	μg/L	2.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	SNC
61. o-Xylene	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	SNC
‡ 62. Xylenes	U	μg/L	3.0	1.0	06/02/22	VI22F02A	06/02/22 15:01	VI22F02A	SNC

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Order: A08739 Date: 06/03/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Equipment_Screen Chain of Custody: 202784

Client Project Name: KH Milford Sample No: Collect Date: 05/25/22

Client Project No: NA Sample Matrix: Blank: Equipment Collect Time: 16:00

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS	Aliquot ID:	A08739-003	Matrix: Blank: Equipment
Method: EPA 5030C/EPA 8260D	Description:	Equipment_Screen	

						Prepar			alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	lni
1. Acetone	U	V+	μg/L	50	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	SN
2. Acrylonitrile	U		μg/L	2.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	SN
3. Benzene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	SN
4. Bromobenzene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	SN
5. Bromochloromethane	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	SN
6. Bromodichloromethane	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	S١
7. Bromoform	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	SN
8. Bromomethane	U	ICV+	μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	SN
9. 2-Butanone	U		μg/L	25	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	S
10. n-Butylbenzene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	SI
11. sec-Butylbenzene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	SN
12. tert-Butylbenzene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	SI
13. Carbon Disulfide	U		μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	S
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	S
15. Chlorobenzene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	S
16. Chloroethane	U		μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	S
17. Chloroform	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	S
18. Chloromethane	U		μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	S
19. 2-Chlorotoluene	U		μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	S
20. 1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	S
21. Dibromochloromethane	U		μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	S
22. Dibromomethane	U		μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	S
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	S
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	S
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	S
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	S
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	S
28. 1,2-Dichloroethane	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	S
29. 1,1-Dichloroethene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	S
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	S
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	S
32. 1,2-Dichloropropane	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	S
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	S
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	S
35. Ethylbenzene	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	S
36. Ethylene Dibromide	U		μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	S
37.2-Hexanone	U		μg/L	50	1.0	06/02/22	VI22F02A	06/02/22 15:27		

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F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584

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Order: A08739 Date: 06/03/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Equipment_Screen Chain of Custody: 202784

Client Project Name: KH Milford Sample No: Collect Date: 05/25/22

Client Project No: NA Sample Matrix: Blank: Equipment Collect Time: 16:00

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS

Aliquot ID: A08739-003 Matrix: Blank: Equipment

Method: EPA 5030C/EPA 8260D

Description: Equipment_Screen

	·				Prepar	ation	Ana	alysis	
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
38. Isopropylbenzene	U	μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	SNC
39. 4-Methyl-2-pentanone	U	μg/L	50	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	SNC
40. Methylene Chloride	U	μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	SNC
‡ 41.2-Methylnaphthalene	U	μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	SNC
42. MTBE	U	μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	SNC
43. Naphthalene	U	μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	SNC
44. n-Propylbenzene	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	SNC
45. Styrene	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	SNC
46. 1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	SNC
47.1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	SNC
48. Tetrachloroethene	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	SNC
49. Toluene	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	SNC
50.1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	SNC
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	SNC
‡ 52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	SNC
53. Trichloroethene	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	SNC
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	SNC
55. 1,2,3-Trichloropropane	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	SNC
‡ 56.1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	SNC
57.1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	SNC
58. 1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	SNC
59. Vinyl Chloride	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	SNC
60. m&p-Xylene	U	μg/L	2.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	SNC
61. o-Xylene	U	μg/L	1.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	SNC
‡ 62. Xylenes	U	μg/L	3.0	1.0	06/02/22	VI22F02A	06/02/22 15:27	VI22F02A	SNC



Analytical Laboratory Report Laboratory Project Number: A08739

Order: A08739 Date: 06/03/22

Definitions/ Qualifiers:

- A: Spike recovery or precision unusable due to dilution.
- **B:** The analyte was detected in the associated method blank.
- E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
- J: The concentration is an estimated value.
- M: Modified Method
- **U:** The analyte was not detected at or above the reporting limit.
- X: Matrix Interference has resulted in a raised reporting limit or distorted result.
- W: Results reported on a wet-weight basis.
- *: Value reported is outside QC limits

Exception Summary:

ICV+ : Recovery in the associated initial calibration verification sample exceeds the upper control limit. Results may be biased high

V+ : Recovery in the associated continuing calibration verification sample (CCV) exceeds the upper control limit. Results

Analysis Locations:

All analyses performed in Holt.



Accreditation Number(s):

T104704518-19-8 (TX)



Order ID: A08739
Page: 1 of 5
Date: 06/03/22

VI22F02A: Method Blank (MB)

Run Time: VI22F02A.MB 06/02/2022 12:51 [VI22F02A	٨]					
	MB Result	MB	MB RDL			
		Qualifier				
Analyte	μg/L		μg/L			
Acetone	U		50			
Acrylonitrile	U		2.0			
Benzene	U		1.0			
Bromobenzene	U		1.0			
Bromochloromethane	U		1.0			
Bromodichloromethane	U		1.0			
Bromoform	U		1.0			
Bromomethane	U		5.0			
2-Butanone	U		25			
n-Butylbenzene	U		1.0			
sec-Butylbenzene	U		1.0			
tert-Butylbenzene	U		1.0			
Carbon Disulfide	U		5.0			
Carbon Tetrachloride	U		1.0			
Chlorobenzene	U		1.0			
Chloroethane	U		5.0			
Chloroform	U		1.0			
Chloromethane	U		5.0			
2-Chlorotoluene	U		5.0			
1,2-Dibromo-3-chloropropane (SIM)	U		1.0			
Dibromochloromethane	U		5.0			
Dibromomethane	U		5.0			
1,2-Dichlorobenzene	U		1.0			
1,3-Dichlorobenzene	U		1.0			
1,4-Dichlorobenzene	U		1.0			
Dichlorodifluoromethane	U		5.0			
1,1-Dichloroethane	U		1.0			
1,2-Dichloroethane	U		1.0			
1,1-Dichloroethene	U		1.0			
cis-1,2-Dichloroethene	U		1.0			
trans-1,2-Dichloroethene	U		1.0			
1,2-Dichloropropane	U		1.0			
cis-1,3-Dichloropropene	U		0.50			
	1914Hblloway Driv	e	Holt, MI 48842	T: (517) 699-0345	F: (517) 699-0388	

T: (810) 220-3300

T: (231) 775-8368

F: (810) 220-3311

F: (231) 775-8584

Brighton, MI 48116

Cadillac, MI 49601

11766 E Grand River

8660 S Madkinaw Trail



Order ID: A08739
Page: 2 of 5
Date: 06/03/22

VI22F02A: Method Blank (MB)

Run Time: VI22F02A.MB 06/02/2022 12:51 [VI22F02A]			
	MB Result	MB	MB RDL
		Qualifier	
Analyte	μg/L		μg/L
trans-1,3-Dichloropropene	U		0.50
Ethylbenzene	U		1.0
Ethylene Dibromide	U		1.0
2-Hexanone	U		50
Isopropylbenzene	U		5.0
4-Methyl-2-pentanone	U		50
Methylene Chloride	U		5.0
2-Methylnaphthalene	U		5.0
MTBE	U		5.0
Naphthalene	U		5.0
n-Propylbenzene	U		1.0
Styrene	U		1.0
1,1,1,2-Tetrachloroethane	U		1.0
1,1,2,2-Tetrachloroethane	U		1.0
Tetrachloroethene	U		1.0
Toluene	U		1.0
1,2,4-Trichlorobenzene	U		5.0
1,1,1-Trichloroethane	U		1.0
1,1,2-Trichloroethane	U		1.0
Trichloroethene	U		1.0
Trichlorofluoromethane	U		1.0
1,2,3-Trichloropropane	U		1.0
1,2,3-Trimethylbenzene	U		1.0
1,2,4-Trimethylbenzene	U		1.0
1,3,5-Trimethylbenzene	U		1.0
Vinyl Chloride	U		1.0
m&p-Xylene	U		2.0
o-Xylene	U		1.0
4-Bromofluorobenzene(S)	91		80-120
Dibromofluoromethane(S)	98		80-120
1,2-Dichloroethane-d4(S)	88		80-120
Toluene-d8(S)	97		80-120

1914 Holloway Drive 11766 E Gand River 8660 S Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order ID: A08739
Page: 3 of 5
Date: 06/03/22

VI22F02A: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VI22F02A.LCS: 06/02/2022 11:33	[VI22F02A] VI22F02	2A.LCSD: 06/02/20	22 11:59 [VI22F	-02AJ								
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Am	ount			Qualifier	Spike Amo	unt Result	Rec.	Qualifier			Qualifie
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
Acetone	50.0	32.8	66	54-140		50.0	32.0	64		3	20	
Acrylonitrile	50.0	46.1	92	70-130		50.0	45.3	91		1	20	
Benzene	50.0	46.9	94	80-120		50.0	45.2	90		4	20	
Bromobenzene	50.0	45.9	92	75-125		50.0	44.7	89		3	20	
Bromochloromethane	50.0	43.4	87	70-130		50.0	41.8	84		4	20	
Bromodichloromethane	50.0	44.5	89	75-120		50.0	43.7	87		2	20	
Bromoform	50.0	48.8	98	70-130		50.0	47.8	96		2	20	
Bromomethane	50.0	64.2	128	68-135		50.0	62.5	125		2	20	
2-Butanone	50.0	38.5	77	70-148		50.0	37.5	75		3	20	
n-Butylbenzene	50.0	58.4	117	70-133		50.0	55.8	112		4	20	
sec-Butylbenzene	50.0	52.5	105	70-125		50.0	50.2	100		5	20	
ert-Butylbenzene	50.0	51.3	103	70-130		50.0	48.7	97		6	20	
Carbon Disulfide	50.0	45.3	91	70-130		50.0	43.1	86		6	20	
Carbon Tetrachloride	50.0	45.3	91	70-130		50.0	44.5	89		2	20	
Chlorobenzene	50.0	49.4	99	80-120		50.0	47.6	95		4	20	
Chloroethane	50.0	46.8	94	61-130		50.0	45.2	90		4	20	
Chloroform	50.0	43.2	86	80-120		50.0	41.5	83		4	20	
Chloromethane	50.0	47.2	94	67-125		50.0	46.2	92		2	20	
2-Chlorotoluene	50.0	48.6	97	75-125		50.0	46.5	93		4	20	
1,2-Dibromo-3-chloropropane (SIM)	50.0	45.6	91	70-130		50.0	44.4	89		2	20	
Dibromochloromethane	50.0	45.5	91	70-130		50.0	44.9	90		1	20	
Dibromomethane	50.0	47.2	94	75-125		50.0	47.0	94		0	20	
1,2-Dichlorobenzene	50.0	49.8	100	70-120		50.0	48.5	97		3	20	
1,3-Dichlorobenzene	50.0	51.6	103	75-125		50.0	50.1	100		3	20	
1,4-Dichlorobenzene	50.0	48.9	98	75-125		50.0	47.1	94		4	20	
Dichlorodifluoromethane	50.0	45.5	91	70-136		50.0	43.5	87		4	20	
1,1-Dichloroethane	50.0	43.6	87	70-130		50.0	41.7	83		5	20	
1,2-Dichloroethane	50.0	40.1	80	70-130		50.0	39.5	79		1	20	
1,1-Dichloroethene	50.0	40.6	81	78-120		50.0	39.2	78		4	20	
cis-1,2-Dichloroethene	50.0	41.8	84	70-125		50.0	40.2	80		5	20	
rans-1,2-Dichloroethene	50.0	45.2	90	70-130		50.0	43.1	86		5	20	
1,2-Dichloropropane	50.0	46.8	94	80-121		50.0	45.8	92		2	20	
cis-1,3-Dichloropropene	50.0	45.9	92	70-130		50.0	45.4	91		1	20	

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Order ID: A08739
Page: 4 of 5
Date: 06/03/22

VI22F02A: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VI22F02A.LCS: 06/02/2022 11:	-	A.LCSD: 06/02/20	22 11:59 [VI22F	-02A]								
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Amo	ount			Qualifier	Spike Amoun	t Result	Rec.	Qualifier			Qualifie
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
trans-1,3-Dichloropropene	50.0	49.6	99	70-132		50.0	48.8	98		1	20	
Ethylbenzene	50.0	50.2	100	80-120		50.0	47.8	96		4	20	
Ethylene Dibromide	50.0	49.5	99	80-120		50.0	49.3	99		0	20	
2-Hexanone	50.0	39.2	78	70-130		50.0	38.6	77		1	20	
Isopropylbenzene	50.0	51.5	103	75-125		50.0	49.5	99		4	20	
4-Methyl-2-pentanone	50.0	47.9	96	70-130		50.0	46.6	93		3	20	
Methylene Chloride	50.0	42.2	84	70-130		50.0	40.6	81		4	20	
2-Methylnaphthalene	50.0	45.2	90	70-130		50.0	45.0	90		0	20	
MTBE	50.0	42.9	86	70-125		50.0	42.3	85		1	20	
Naphthalene	50.0	49.6	99	70-130		50.0	49.0	98		1	20	
n-Propylbenzene	50.0	51.9	104	70-130		50.0	49.4	99		5	20	
Styrene	50.0	47.1	94	70-130		50.0	45.3	91		3	20	
1,1,1,2-Tetrachloroethane	50.0	49.0	98	80-130		50.0	47.5	95		3	20	
1,1,2,2-Tetrachloroethane	50.0	55.8	112	70-130		50.0	54.2	108		4	20	
Tetrachloroethene	50.0	53.5	107	70-130		50.0	50.4	101		6	20	
Toluene	50.0	48.7	97	80-120		50.0	46.9	94		3	20	
1,2,4-Trichlorobenzene	50.0	51.7	103	70-130		50.0	51.1	102		1	20	
1,1,1-Trichloroethane	50.0	44.7	89	70-130		50.0	42.8	86		3	20	
1,1,2-Trichloroethane	50.0	48.3	97	75-125		50.0	46.8	94		3	20	
Trichloroethene	50.0	44.5	89	71-125		50.0	42.7	85		5	20	
Trichlorofluoromethane	50.0	46.3	93	70-133		50.0	44.3	89		4	20	
1,2,3-Trichloropropane	50.0	49.2	98	75-125		50.0	47.5	95		3	20	
1,2,3-Trimethylbenzene	50.0	48.8	98	70-130		50.0	47.0	94		4	20	
1,2,4-Trimethylbenzene	50.0	52.2	104	75-130		50.0	50.2	100		4	20	
1,3,5-Trimethylbenzene	50.0	51.7	103	75-130		50.0	49.5	99		4	20	
Vinyl Chloride	50.0	50.0	100	74-125		50.0	47.5	95		5	20	
m&p-Xylene	100	101	101	75-130		100	96.1	96		5	20	
o-Xylene	50.0	49.1	98	80-120		50.0	47.8	96		2	20	
4-Bromofluorobenzene(S)			95	80-120				97				
Dibromofluoromethane(S)			94	80-120				94				
1,2-Dichloroethane-d4(S)			84	80-120				84				
Toluene-d8(S)			96	80-120				98				

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Order ID: A08739
Page: 5 of 5
Date: 06/03/22

Definitions/ Qualifiers:

- U: The analyte was not detected at or above the Reporting Limit (RL).
- *: Value reported is outside QC limits

Exception Summary:

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

Report Generated By:

By Katherine Jones at 4:13 PM, Jun 03, 2022

Fibertec environmental services

Analytical Laboratory

1914 Holloway Drive Holt, MI 48842

Phone: 517 699 0345 Fax: 517 699 0388

emall: lab@fibertec.us

8660 S. Mackinaw Trail

Cadillac, MI 49601 Phone: 231 775 8368 Fax: 231 775 8584

Geoprobe

11766 E. Grand River Rd. Brighton, MI 48116

Phone: 810 220 3300 Fax: 810 220 3311

Chain of Custody #

202784
PAGE ______ of _____

Client Name: Artaals					PARAMETERS		Matrix Code Deliverables				
contact Person: Christian Scidel							S Soil Gw Ground Water Level 2				
Project Name/ Number:							A Air Sw Surface Water Level 3				
KH Milford	Good					PLE H	O Oil ww Waste Water Level 4				
Email distribution list: Christian. Seidel @arcadls. Can John. McInnis @ arcadls. can	MATRIX (SEE RIGHT CORNER FOR CODE)	# OF CONTAINERS	8260			HOLD SAMPLE	P Wipe X Other: Specify EDD				
Quote# 849	SEE RIGH	NTA				I					
Purchase Order# 30047630	RIX (1	C	VOCs								
Date Time Sample # Client Sample Descriptor	ΑÃ						Remarks:				
5/25/22 1715 VAP-02-11_115_120	GW	3	×								
1550 Equipment-pump	0										
1600 Equipment-screen	W		П								
	1	,					Received By Lab				
							MAY 2 6 2022				
							Initials:				
							Received				
							On Ice				
Comments:		_	_				1				
					11.7						
Sampled/Relinquished By: Malign Olinder fil an	Date	/ Tim 26	e		Received By:	,					
					Redeived By	for the	Shap 5/26/22 1:35				
Relinquished/By:	4/2	/Tim	20	, 15=30	kedelved by	A	- / /				
Relinquished by:	Date	/Tim	ne		Received By	Laboratory:					
Turnground Time ALL RESULTS WILL BE SENT BY THE END O	F THE B	USINE	SS D	AY			LAB USE ONLY				
						Ell I i i	A .				
1 bus. day2 bus. days3 bus. days		4 k	ous. c	lays		Fibertec project number: 408739					
5-7 bus. days (standard) Other (specify time/date requirement):						Temperatu	ure upon receipt at Lab: 4, 3°C				
Pleas	e se	e bo	ack	for terms an	d conditio	ns					

Attachment 15

Laboratory Analytical Reports (June and July 2022)

Revised – Added Lab Reports



Friday, June 17, 2022

Fibertec Project Number: A08975

Project Identification: ZF Active Safety US Inc. (Milford) /

Submittal Date: 06/08/2022

Ms. Stacey Hannula Arcadis U.S., Inc. - Novi 28550 Cabot Drive Suite 500 Novi, MI 48377

Dear Ms. Hannula,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

By Sue Ricketts at 9:55 AM, Jun 17, 2022

For Daryl P. Strandbergh Laboratory Director

Enclosures

Page:



Order: A08975 Date: 06/17/22

09:35

Matrix: Ground Water

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2_060822 Chain of Custody: 203194

Client Project Name: ZF Active Safety US Inc. Sample No: Collect Date: 06/08/22

A08975-001

Aliquot ID:

(Milford)

Client Project No: NA Sample Matrix: Ground Water Collect Time:

Sample Comments:

Volatile Organic Compounds (VOCs) by GC/MS

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volunie Organie Compounds (VOCS) by Co.	,,,,,			7 1119	uo: .D.	7100070 001	matrix.	Orouna mator		
Method: EPA 5030C/EPA 8260D				Des	cription:	OW-16D2_060822				
						Prepara	tion	Ana	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution		P. Batch	A. Date	A. Batch	Init.
1. Acetone	U	L-	μg/L	50	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
3. Benzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
4. Bromobenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
5. Bromochloromethane	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
6. Bromodichloromethane	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
7. Bromoform	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
8. Bromomethane	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
9.2-Butanone	U		μg/L	25	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
10. n-Butylbenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
11. sec-Butylbenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
12. tert-Butylbenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
13. Carbon Disulfide	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
15. Chlorobenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
16. Chloroethane	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
17. Chloroform	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
18. Chloromethane	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
19. 2-Chlorotoluene	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
21. Dibromochloromethane	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
22. Dibromomethane	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
23.1,2-Dichlorobenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
24.1,3-Dichlorobenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
25.1,4-Dichlorobenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
27.1,1-Dichloroethane	3.6		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
29.1,1-Dichloroethene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
30. cis-1,2-Dichloroethene	19		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
31. trans-1,2-Dichloroethene	1.4		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
35. Ethylbenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
36. Ethylene Dibromide	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
37.2-Hexanone	U		μg/L	50	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order: Date:

09:35

A08975 06/17/22

Arcadis U.S., Inc. - Novi OW-16D2_060822 203194 Client Identification: Sample Description: Chain of Custody:

Client Project Name: ZF Active Safety US Inc. 06/08/22 Sample No: Collect Date: (Milford)

Client Project No: NA Sample Matrix: **Ground Water** Collect Time:

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable #: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by Go	•	uot ID:	A08975-001	Matrix:	Ground Water					
Method: EPA 5030C/EPA 8260D				Des	cription:	OW-16D2_060822				
						Prepara			alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
38. Isopropylbenzene	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
39.4-Methyl-2-pentanone	U		μg/L	50	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
40. Methylene Chloride	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
‡ 41.2-Methylnaphthalene	U	V-	μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
42. MTBE	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
43. Naphthalene	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
44. n-Propylbenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
45. Styrene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
46.1,1,1,2-Tetrachloroethane	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
47.1,1,2,2-Tetrachloroethane	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
48. Tetrachloroethene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
49. Toluene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
50.1,2,4-Trichlorobenzene	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
51.1,1,1-Trichloroethane	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
‡ 52.1,1,2-Trichloroethane	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
53. Trichloroethene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
54. Trichlorofluoromethane	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
55.1,2,3-Trichloropropane	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
‡ 56.1,2,3-Trimethylbenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
57.1,2,4-Trimethylbenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
58.1,3,5-Trimethylbenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
59. Vinyl Chloride	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
60. m&p-Xylene	U		μg/L	2.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
61.o-Xylene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC
‡ 62. Xylenes	U		μg/L	3.0	1.0	06/13/22	VI22F13B	06/14/22 01:41	VI22F13B	BRC



Order: A08975 Date: 06/17/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2R1_060822 Chain of Custody: 203194

Client Project Name: ZF Active Safety US Inc. Sample No: Collect Date: 06/08/22

(Milford)

Client Project No: NA Sample Matrix: Ground Water Collect Time: 11:00

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GO	C/MS			Aliq	juot ID:	A08975-002	Matrix:	Ground Water		
Method: EPA 5030C/EPA 8260D				Des	cription:	OW-16D2R1_060	822			
						Prepai	ration	Ana	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U	L-	μg/L	50	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
3. Benzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
4. Bromobenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
5. Bromochloromethane	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
6. Bromodichloromethane	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
7. Bromoform	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
8. Bromomethane	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
9.2-Butanone	U		μg/L	25	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
10. n-Butylbenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
11. sec-Butylbenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
12. tert-Butylbenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
13. Carbon Disulfide	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
15. Chlorobenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
16. Chloroethane	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
17. Chloroform	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
18. Chloromethane	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
19.2-Chlorotoluene	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
21. Dibromochloromethane	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
22. Dibromomethane	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
23.1,2-Dichlorobenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
24.1,3-Dichlorobenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
25.1,4-Dichlorobenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
27.1,1-Dichloroethane	2.5		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
29.1,1-Dichloroethene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
30. cis-1,2-Dichloroethene	21		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
31. trans-1,2-Dichloroethene	1.1		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
35. Ethylbenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
36. Ethylene Dibromide	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
37.2-Hexanone	U		μg/L	50	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order: Date:

A08975 06/17/22

Arcadis U.S., Inc. - Novi OW-16D2R1_060822 203194 Client Identification: Sample Description: Chain of Custody:

ZF Active Safety US Inc. 06/08/22 Client Project Name: Sample No: Collect Date: (Milford)

Client Project No: NA Sample Matrix: **Ground Water** Collect Time: 11:00

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable #: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS				Aliq	uot ID:	A08975-002	Matrix:	Ground Water		
Method: EPA 5030C/EPA 8260D				Des	cription:	OW-16D2R1_060	822			
						Prepar	ation	An	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
38. Isopropylbenzene	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
39.4-Methyl-2-pentanone	U		μg/L	50	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
40. Methylene Chloride	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
‡ 41.2-Methylnaphthalene	U	V-	μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
42.MTBE	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
43. Naphthalene	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
44. n-Propylbenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
45. Styrene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
46.1,1,1,2-Tetrachloroethane	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
47.1,1,2,2-Tetrachloroethane	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
48. Tetrachloroethene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
49. Toluene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
50.1,2,4-Trichlorobenzene	U		μg/L	5.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
51.1,1,1-Trichloroethane	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
‡ 52.1,1,2-Trichloroethane	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
53. Trichloroethene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
54. Trichlorofluoromethane	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
55.1,2,3-Trichloropropane	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
‡ 56.1,2,3-Trimethylbenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
57. 1,2,4-Trimethylbenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
58.1,3,5-Trimethylbenzene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
59. Vinyl Chloride	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
60. m&p-Xylene	U		μg/L	2.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
61. o-Xylene	U		μg/L	1.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC
‡ 62. Xylenes	U		μg/L	3.0	1.0	06/13/22	VI22F13B	06/14/22 02:07	VI22F13B	BRC



Order: Date:

Matrix: Blank: Field

A08975 06/17/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Field Blank Chain of Custody: 203194

Client Project Name: ZF Active Safety US Inc. Sample No: Collect Date: 06/08/22

Aliquot ID:

A08975-003

(Milford)

Client Project No: NA Sample Matrix: Blank: Field Collect Time: 11:10

Sample Comments:

Volatile Organic Compounds (VOCs) by GC/MS

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volume Organic Compounds (VOCS) by CO	-									
Method: EPA 0624.1/EPA 8260D				Des	cription:	Field Blank				
						Prepa	ration	An	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U	V+	μg/L	50	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
‡ 2. Acrylonitrile	U	V+ L+	μg/L	2.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
3. Benzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
4. Bromobenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
5. Bromochloromethane	U	V+	μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
6. Bromodichloromethane	U	V+ L+	μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
7. Bromoform	U	V+ L+	μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
8. Bromomethane	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
9. 2-Butanone	U	V+	μg/L	25	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
10. n-Butylbenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
11. sec-Butylbenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
12. tert-Butylbenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
13. Carbon Disulfide	U	V+	μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
15. Chlorobenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
16. Chloroethane	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
17. Chloroform	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
18. Chloromethane	U	V+	μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
19.2-Chlorotoluene	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U	V+	μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
21. Dibromochloromethane	U	V+	μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
22. Dibromomethane	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
23.1,2-Dichlorobenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
24.1,3-Dichlorobenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
25.1,4-Dichlorobenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
29.1,1-Dichloroethene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
33. cis-1,3-Dichloropropene	U	V+	μg/L	0.50	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
34. trans-1,3-Dichloropropene	U	V+ L+	μg/L	0.50	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order: Date:

A08975 06/17/22

203194 Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Field Blank Chain of Custody:

06/08/22 ZF Active Safety US Inc. Collect Date: Client Project Name: Sample No: (Milford)

Client Project No: NA Sample Matrix: Blank: Field Collect Time: 11:10

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GO	C/MS			Aliq	uot ID:	A08975-003	Matrix: I	Blank: Field		
Method: EPA 0624.1/EPA 8260D				Des	cription:	Field Blank				
						Prepar	ation	An	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
35. Ethylbenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
36. Ethylene Dibromide	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
37.2-Hexanone	U	V+	μg/L	50	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
38. Isopropylbenzene	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
39.4-Methyl-2-pentanone	U	V+ L+	μg/L	50	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
40. Methylene Chloride	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
‡ 41.2-Methylnaphthalene	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
42.MTBE	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
43. Naphthalene	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
44. n-Propylbenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
45. Styrene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
46.1,1,1,2-Tetrachloroethane	U	V+	μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
47.1,1,2,2-Tetrachloroethane	U	V+ L+	μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
48. Tetrachloroethene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
49. Toluene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
50.1,2,4-Trichlorobenzene	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
51.1,1,1-Trichloroethane	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
‡ 52.1,1,2-Trichloroethane	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
53. Trichloroethene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
54. Trichlorofluoromethane	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
55.1,2,3-Trichloropropane	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
‡ 56.1,2,3-Trimethylbenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
57.1,2,4-Trimethylbenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
58.1,3,5-Trimethylbenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
59. Vinyl Chloride	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
60. m&p-Xylene	U		μg/L	2.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
61.o-Xylene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC
‡ 62. Xylenes	U		μg/L	3.0	1.0	06/15/22	VM22F15A	06/15/22 12:11	VM22F15A	SNC



Order: A08975 Date: 06/17/22

Matrix: Blank: Equipment

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Equipment Blank Chain of Custody: 203194

Client Project Name: ZF Active Safety US Inc. Sample No: Collect Date: 06/08/22

Aliquot ID:

A08975-004

(Milford)

Volatile Organic Compounds (VOCs) by GC/MS

Client Project No: NA Sample Matrix: Blank: Equipment Collect Time: 11:12

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Method: EPA 5030C/EPA 8260D	/IVIO			-		Equipment Blank	Wati IX. I	biank: Equipme		
Method. El A 30300/El A 0200D				Des	cription.		4:	Δ	-11-	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prepara P. Date	P. Batch	A. Date	alysis A. Batch	Init.
1. Acetone	U	V+	μg/L	50	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
‡ 2. Acrylonitrile	U	V+ L+	μg/L	2.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
3. Benzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
4. Bromobenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
5. Bromochloromethane	U	V+	μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
6. Bromodichloromethane	U	V+ L+	μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNO
7. Bromoform	U	V+ L+	μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNO
8. Bromomethane	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
9.2-Butanone	U	V+	μg/L	25	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
10. n-Butylbenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNO
11. sec-Butylbenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNO
12. tert-Butylbenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNO
13. Carbon Disulfide	U	V÷	μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNO
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNO
15. Chlorobenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNO
16. Chloroethane	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNO
17. Chloroform	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNO
18. Chloromethane	U	V+	μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNO
19.2-Chlorotoluene	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNO
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U	V+	μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNO
21. Dibromochloromethane	U	V+	μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNO
22. Dibromomethane	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNO
23.1,2-Dichlorobenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNO
24.1,3-Dichlorobenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNO
25.1,4-Dichlorobenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNO
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNO
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNO
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNO
29.1,1-Dichloroethene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNO
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNO
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNO
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNO
33. cis-1,3-Dichloropropene	U	V+	μg/L	0.50	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNO
34. trans-1,3-Dichloropropene	U	V+ L+	μg/L	0.50	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order: A08975 06/17/22 Date:

Arcadis U.S., Inc. - Novi 203194 Client Identification: Sample Description: **Equipment Blank** Chain of Custody:

06/08/22 Client Project Name: ZF Active Safety US Inc. Collect Date: Sample No: (Milford)

Client Project No: NA Sample Matrix: Blank: Equipment Collect Time: 11:12

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by G	GC/MS			Aliq	uot ID:	A08975-004	Matrix: I	Blank: Equipme	nt	
Method: EPA 5030C/EPA 8260D				Des	cription:	Equipment Blank				
						Prepara	ation	An	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
35. Ethylbenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
36. Ethylene Dibromide	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
37.2-Hexanone	U	V+	μg/L	50	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
38. Isopropylbenzene	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
39.4-Methyl-2-pentanone	U	V+ L+	μg/L	50	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
40. Methylene Chloride	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
‡ 41.2-Methylnaphthalene	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
42.MTBE	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
43. Naphthalene	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
44. n-Propylbenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
45. Styrene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
46.1,1,1,2-Tetrachloroethane	U	V+	μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
47.1,1,2,2-Tetrachloroethane	U	V+ L+	μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
48. Tetrachloroethene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
49. Toluene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
50.1,2,4-Trichlorobenzene	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
51.1,1,1-Trichloroethane	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
‡ 52.1,1,2-Trichloroethane	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
53. Trichloroethene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
54. Trichlorofluoromethane	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
55.1,2,3-Trichloropropane	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
‡ 56.1,2,3-Trimethylbenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
57.1,2,4-Trimethylbenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
58.1,3,5-Trimethylbenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
59. Vinyl Chloride	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
60. m&p-Xylene	U		μg/L	2.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
61. o-Xylene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC
‡ 62. Xylenes	U		μg/L	3.0	1.0	06/15/22	VM22F15A	06/15/22 12:39	VM22F15A	SNC



Order: A08975 Date: 06/17/22

Matrix: Blank: Trip

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Trip Blank Chain of Custody: 203194

Client Project Name: ZF Active Safety US Inc. Sample No: Collect Date: 06/08/22 (Milford)

Aliquot ID:

A08975-005

Client Project No: NA Sample Matrix: Blank: Trip Collect Time: NA

Sample Comments:

Volatile Organic Compounds (VOCs) by GC/MS

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Method: EPA 5030C/EPA 8260D				Des	cription:	Trip Blank				
						Prepar	ation	An	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init
1. Acetone	U	V+	μg/L	50	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNO
‡ 2. Acrylonitrile	U	V+ L+	μg/L	2.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNO
3. Benzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNO
4. Bromobenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SN
5. Bromochloromethane	U	V+	μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNO
6. Bromodichloromethane	U	V+ L+	μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNO
7. Bromoform	U	V+ L+	μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNO
8. Bromomethane	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNO
9.2-Butanone	U	V+	μg/L	25	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SN
10. n-Butylbenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNO
11. sec-Butylbenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNO
12. tert-Butylbenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SN
13. Carbon Disulfide	U	V+	μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SN
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SN
15. Chlorobenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SN
16. Chloroethane	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SN
17. Chloroform	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SN
18. Chloromethane	U	V+	μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SN
19.2-Chlorotoluene	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SN
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U	V+	μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SN
21. Dibromochloromethane	U	V+	μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SN
22. Dibromomethane	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SN
23.1,2-Dichlorobenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SN
24.1,3-Dichlorobenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SN
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SN
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SN
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SN
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SN
29. 1,1-Dichloroethene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SN
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SN
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SN
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SN
33. cis-1,3-Dichloropropene	U	V+	μg/L	0.50	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SN
34. trans-1,3-Dichloropropene	U	V+ L+	μg/L	0.50	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SN

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order: A08975 Date: 06/17/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Trip Blank Chain of Custody: 203194

Client Project Name: ZF Active Safety US Inc. Sample No: Collect Date: 06/08/22

(Milford)

Client Project No: NA Sample Matrix: Blank: Trip Collect Time: NA

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by	GC/MS			Aliq	uot ID:	A08975-005	Matrix: I	Blank: Trip		
Method: EPA 5030C/EPA 8260D				Des	cription:	Trip Blank				
						Prepar	ation	An	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
35. Ethylbenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
36. Ethylene Dibromide	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
37.2-Hexanone	U	V+	μg/L	50	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
38. Isopropylbenzene	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
39. 4-Methyl-2-pentanone	U	V+ L+	μg/L	50	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
40. Methylene Chloride	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
‡ 41.2-Methylnaphthalene	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
42.MTBE	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
43. Naphthalene	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
44. n-Propylbenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
45. Styrene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
46.1,1,1,2-Tetrachloroethane	U	V+	μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
47.1,1,2,2-Tetrachloroethane	U	V+ L+	μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
48. Tetrachloroethene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
49. Toluene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
50. 1,2,4-Trichlorobenzene	U		μg/L	5.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
51.1,1,1-Trichloroethane	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
‡ 52.1,1,2-Trichloroethane	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
53. Trichloroethene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
54. Trichlorofluoromethane	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
55. 1,2,3-Trichloropropane	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
‡ 56.1,2,3-Trimethylbenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
57. 1,2,4-Trimethylbenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
58.1,3,5-Trimethylbenzene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
59. Vinyl Chloride	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
60. m&p-Xylene	U		μg/L	2.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
61.o-Xylene	U		μg/L	1.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC
‡ 62. Xylenes	U		μg/L	3.0	1.0	06/15/22	VM22F15A	06/15/22 13:07	VM22F15A	SNC



Analytical Laboratory Report Laboratory Project Number: A08975

Order: A08975 Date: 06/17/22

Definitions/ Qualifiers:

- A: Spike recovery or precision unusable due to dilution.
- B: The analyte was detected in the associated method blank.
- E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
- J: The concentration is an estimated value.
- M: Modified Method
- U: The analyte was not detected at or above the reporting limit.
- X: Matrix Interference has resulted in a raised reporting limit or distorted result.
- W: Results reported on a wet-weight basis.
- *: Value reported is outside QC limits

Exception Summary:

L- : Recovery in the associated laboratory sample (LCS) exceeds the lower control limit. Results may be biased low.
 L+ : Recovery in the associated laboratory sample (LCS) exceeds the upper control limit. Results may be biased high.
 V- : Recovery in the associated continuing calibration verification sample (CCV) exceeds the lower control limit. Results may be biased low.

V+ : Recovery in the associated continuing calibration verification sample (CCV) exceeds the upper control limit. Results may be biased high.

Analysis Locations:

All analyses performed in Holt.



Accreditation Number(s):

T104704518-19-8 (TX)



Order ID: A08975 Page: 1 of 9 Date: 06/17/22

VI22F13B: Method Blank (MB)

Run Time: VI22F13B.MB 06/14/2022 00:49 [VI22F1	13B]					
	MB Result	MB	MB RDL			
		Qualifier				
Analyte	μg/L		μg/L			
Acetone	U		50			
Acrylonitrile	U		2.0			
Benzene	U		1.0			
Bromobenzene	U		1.0			
Bromochloromethane	U		1.0			
Bromodichloromethane	U		1.0			
Bromoform	U		1.0			
Bromomethane	U		5.0			
2-Butanone	U		25			
n-Butylbenzene	U		1.0			
sec-Butylbenzene	U		1.0			
tert-Butylbenzene	U		1.0			
Carbon Disulfide	U		5.0			
Carbon Tetrachloride	U		1.0			
Chlorobenzene	U		1.0			
Chloroethane	U		5.0			
Chloroform	U		1.0			
Chloromethane	U		5.0			
2-Chlorotoluene	U		5.0			
1,2-Dibromo-3-chloropropane (SIM)	U		1.0			
Dibromochloromethane	U		5.0			
Dibromomethane	U		5.0			
1,2-Dichlorobenzene	U		1.0			
1,3-Dichlorobenzene	U		1.0			
1,4-Dichlorobenzene	U		1.0			
Dichlorodifluoromethane	U		5.0			
1,1-Dichloroethane	U		1.0			
1,2-Dichloroethane	U		1.0			
1,1-Dichloroethene	U		1.0			
cis-1,2-Dichloroethene	U		1.0			
trans-1,2-Dichloroethene	U		1.0			
1,2-Dichloropropane	U		1.0			
cis-1,3-Dichloropropene	U		0.50			
	1914 Holloway Driv	re	Holt, MI 48842	T: (517) 699-0345	F: (517) 699-0388	
			,	T (010) 000 0000	= //	

T: (810) 220-3300

T: (231) 775-8368

DCSID: G-6017.2 (06/10/2020) lab@fibertec.us

Brighton, MI 48116

Cadillac, MI 49601

11766 E. Grand River

8660 S. Mackinaw Trail



Order ID: A08975 Page: 2 of 9 Date: 06/17/22

VI22F13B: Method Blank (MB)

MB Result	MB	MB RDL
	Qualifier	
μg/L		μg/L
U		0.50
U		1.0
U		1.0
U		50
U		5.0
U		50
U		5.0
U		1.0
U		5.0
U		1.0
U		2.0
U		1.0
100		80-120
102		80-120
104		80-120
101		80-120
	μg/L U U U U U U U U U U U U U	Qualifier μg/L U U U U U U U U U U U U U

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order ID: A08975 Page: 3 of 9 Date: 06/17/22

VI22F13B: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VI22F13B.LCS: 06/13/2022 23:31 [=	3B.LCSD: 06/13/20	·=	-								
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
Analyte	Spike Am		%	%	Qualifier	Spike Amoun		Rec. %	Qualifier	%	%	Qualifie
Acetone	μg/L 50.0	μg/L 25.7	51	54-140	*	μg/L 50.0	μg/L 26.3	53	*	4	20	
Acrylonitrile	50.0	47.4	95	70-130	•	50.0	47.0	94	•	1	20	
Benzene	50.0	53.2	106	80-120		50.0	51.3	103		3	20	
Bromobenzene	50.0	47.9	96	75-125		50.0	46.7	93		3	20	
Bromochloromethane	50.0	52.6	105	70-120		50.0	51.6	103		2	20	
Bromodichloromethane	50.0	52.8	105	75-120		50.0	51.6	103		3	20	
Bromoform	50.0	50.4	100	70-120		50.0	49.7	99		2	20	
Bromomethane	50.0	63.5	127	68-135		50.0	61.9	124		2	20	
2-Butanone	50.0	41.2	82	70-148		50.0	42.3	85		4	20	
n-Butylbenzene	50.0	54.4	109	70-146		50.0	52.2	104		5	20	
sec-Butylbenzene	50.0	52.7	109	70-133		50.0	50.7	104		4	20	
tert-Butylbenzene	50.0	53.2	105	70-125		50.0	51.2	101		4	20	
Carbon Disulfide	50.0	48.6	97	70-130		50.0	46.0	92		5	20	
Carbon Tetrachloride	50.0	51.7	103	70-130		50.0	48.9	98		5	20	
Chlorobenzene	50.0	52.5	105	80-120		50.0	50.3	101		4	20	
Chloroethane	50.0	59.5	119	61-130		50.0	56.8	114		4	20	
Chloroform	50.0	52.6	105	80-120		50.0	51.2	102		3	20	
Chloromethane	50.0	59.2	118	67-125		50.0	56.5	113		4	20	
2-Chlorotoluene	50.0	54.8	110	75-125		50.0	52.5	105		5	20	
I,2-Dibromo-3-chloropropane (SIM)	50.0	46.9	94	70-120		50.0	46.9	94		0	20	
Dibromochloromethane	50.0	48.7	97	70-130		50.0	48.3	97		0	20	
Dibromomethane	50.0	48.8	98	70-130 75-125		50.0	47.8	96		2	20	
1.2-Dichlorobenzene	50.0	52.4	105	70-120		50.0	50.6	101		4	20	
1,3-Dichlorobenzene	50.0	52.4	100	70-120 75-125		50.0	48.9	98		2	20	
1,4-Dichlorobenzene	50.0	48.7	97	75-125 75-125		50.0	47.2	94		3	20	
T,4-Dichlorobenzene Dichlorodifluoromethane	50.0	61.2	122	70-125		50.0	56.8	114		7	20	
1.1-Dichloroethane	50.0	56.9	114	70-130		50.0	54.8	110		4	20	
1,2-Dichloroethane	50.0	48.1	96	70-130		50.0	47.3	95		1	20	
1.1-Dichloroethane	50.0	51.4	103	70-130 78-120		50.0	48.5	95		6	20	
cis-1,2-Dichloroethene	50.0	51.4	103	78-120 70-125		50.0		102		4	20	
•	50.0	52.9	106	70-125 70-130		50.0	51.1 48.8	98		5	20	
trans-1,2-Dichloroethene		51.4 57.9								4		
1,2-Dichloropropane	50.0		116	80-121		50.0	56.1	112			20	
cis-1,3-Dichloropropene	50.0	49.9	100	70-130		50.0	48.3	97		3	20	

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Order ID: A08975 Page: 4 of 9 Date: 06/17/22

VI22F13B: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VI22F13B.LCS: 06/13/2022 23:3	31 [VI22F13B] VI22F13	3B.LCSD: 06/13/20	22 23:57 [VI22I	F13B]								
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Am	ount			Qualifier	Spike Amoun	t Result	Rec.	Qualifier			Qualifier
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
trans-1,3-Dichloropropene	50.0	49.9	100	70-132		50.0	49.1	98		2	20	
Ethylbenzene	50.0	52.5	105	80-120		50.0	50.6	101		4	20	
Ethylene Dibromide	50.0	48.7	97	80-120		50.0	47.9	96		1	20	
2-Hexanone	50.0	41.7	83	70-130		50.0	41.2	82		1	20	
Isopropylbenzene	50.0	52.8	106	75-125		50.0	50.4	101		5	20	
4-Methyl-2-pentanone	50.0	54.3	109	70-130		50.0	55.1	110		1	20	
Methylene Chloride	50.0	51.8	104	70-130		50.0	50.6	101		3	20	
2-Methylnaphthalene	50.0	37.2	74	70-130		50.0	38.7	77		4	20	
MTBE	50.0	54.8	110	70-125		50.0	54.3	109		1	20	
Naphthalene	50.0	43.7	87	70-130		50.0	43.8	88		1	20	
n-Propylbenzene	50.0	54.7	109	70-130		50.0	52.3	105		4	20	
Styrene	50.0	44.8	90	70-130		50.0	43.6	87		3	20	
1,1,1,2-Tetrachloroethane	50.0	52.6	105	80-130		50.0	51.3	103		2	20	
1,1,2,2-Tetrachloroethane	50.0	59.0	118	70-130		50.0	58.3	117		1	20	
Tetrachloroethene	50.0	52.9	106	70-130		50.0	49.9	100		6	20	
Toluene	50.0	55.0	110	80-120		50.0	53.0	106		4	20	
1,2,4-Trichlorobenzene	50.0	47.7	95	70-130		50.0	46.4	93		2	20	
1,1,1-Trichloroethane	50.0	56.5	113	70-130		50.0	53.4	107		5	20	
1,1,2-Trichloroethane	50.0	52.6	105	75-125		50.0	51.2	102		3	20	
Trichloroethene	50.0	47.5	95	71-125		50.0	44.8	90		5	20	
Trichlorofluoromethane	50.0	58.7	117	70-133		50.0	54.7	109		7	20	
1,2,3-Trichloropropane	50.0	52.3	105	75-125		50.0	53.0	106		1	20	
1,2,3-Trimethylbenzene	50.0	52.1	104	70-130		50.0	50.3	101		3	20	
1,2,4-Trimethylbenzene	50.0	53.0	106	75-130		50.0	51.4	103		3	20	
1,3,5-Trimethylbenzene	50.0	52.8	106	75-130		50.0	51.1	102		4	20	
Vinyl Chloride	50.0	59.8	120	74-125		50.0	56.5	113		6	20	
n&p-Xylene	100	108	108	75-130		100	104	104		4	20	
o-Xylene	50.0	53.7	107	80-120		50.0	52.2	104		3	20	
4-Bromofluorobenzene(S)			100	80-120				101				
Dibromofluoromethane(S)			103	80-120				102				
1,2-Dichloroethane-d4(S)			99	80-120				110				
Toluene-d8(S)			102	80-120				101				

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Order ID: A08975 Page: 5 of 9 Date: 06/17/22

VM22F15A: Method Blank (MB)

Run Time: VM22F15A.MB 06/15/2022 11:43	3 [VM22F15A]				
	MB Result ME	B MB RDL			
	Qu	alifier			
Analyte	μg/L	μg/L			
Acetone	U	50			
Acrylonitrile	U	2.0			
Benzene	U	1.0			
Bromobenzene	U	1.0			
Bromochloromethane	U	1.0			
Bromodichloromethane	U	1.0			
Bromoform	U	1.0			
Bromomethane	U	5.0			
2-Butanone	U	25			
n-Butylbenzene	U	1.0			
sec-Butylbenzene	U	1.0			
tert-Butylbenzene	U	1.0			
Carbon Disulfide	U	5.0			
Carbon Tetrachloride	U	1.0			
Chlorobenzene	U	1.0			
Chloroethane	U	5.0			
Chloroform	U	1.0			
Chloromethane	U	5.0			
2-Chlorotoluene	U	5.0			
1,2-Dibromo-3-chloropropane (SIM)	U	1.0			
Dibromochloromethane	U	5.0			
Dibromomethane	U	5.0			
1,2-Dichlorobenzene	U	1.0			
1,3-Dichlorobenzene	U	1.0			
1,4-Dichlorobenzene	U	1.0			
Dichlorodifluoromethane	U	5.0			
1,1-Dichloroethane	U	1.0			
1,2-Dichloroethane	U	1.0			
1,1-Dichloroethene	U	1.0			
cis-1,2-Dichloroethene	U	1.0			
trans-1,2-Dichloroethene	U	1.0			
1,2-Dichloropropane	U	1.0			
cis-1,3-Dichloropropene	U	0.50			
	1914 Holloway Drive	Holt, MI 48842	T: (517) 699-0345	F: (517) 699-0388	
			T (040) 000 0000	= /·	

T: (810) 220-3300

T: (231) 775-8368

F: (810) 220-3311

F: (231) 775-8584

Brighton, MI 48116

Cadillac, MI 49601

11766 E. Grand River

8660 S. Mackinaw Trail



Order ID: A08975 Page: 6 of 9 Date: 06/17/22

VM22F15A: Method Blank (MB)

Run Time: VM22F15A.MB 06/15/2022 11	1:43 [VM22F15A]		
	MB Result	MB	MB RDL
		Qualifier	
Analyte	μg/L		μg/L
trans-1,3-Dichloropropene	U		0.50
Ethylbenzene	U		1.0
Ethylene Dibromide	U		1.0
2-Hexanone	U		50
Isopropylbenzene	U		5.0
4-Methyl-2-pentanone	U		50
Methylene Chloride	U		5.0
2-Methylnaphthalene	U		5.0
MTBE	U		5.0
Naphthalene	U		5.0
n-Propylbenzene	U		1.0
Styrene	U		1.0
1,1,1,2-Tetrachloroethane	U		1.0
1,1,2,2-Tetrachloroethane	U		1.0
Tetrachloroethene	U		1.0
Toluene	U		1.0
1,2,4-Trichlorobenzene	U		5.0
1,1,1-Trichloroethane	U		1.0
1,1,2-Trichloroethane	U		1.0
Trichloroethene	U		1.0
Trichlorofluoromethane	U		1.0
1,2,3-Trichloropropane	U		1.0
1,2,3-Trimethylbenzene	U		1.0
1,2,4-Trimethylbenzene	U		1.0
1,3,5-Trimethylbenzene	U		1.0
Vinyl Chloride	U		1.0
m&p-Xylene	U		2.0
o-Xylene	U		1.0
4-Bromofluorobenzene(S)	92		80-120
Dibromofluoromethane(S)	102		80-120
1,2-Dichloroethane-d4(S)	97		80-120
Toluene-d8(S)	99		80-120
i olueile-uo(3)	99		00-120

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order ID: A08975 Page: 7 of 9 Date: 06/17/22

VM22F15A: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VM22F15A.LCS: 06/15/2022 10:18	[VM22F15A] VM2	2F15A.LCSD: 06/15	/2022 10:46 [V	M22F15A]								
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Am				Qualifier	Spike Amoun		Rec.	Qualifier			Qualifier
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
Acetone	50.0	32.9	66	54-140		50.0	30.4	61		8	20	
Acrylonitrile	50.0	65.4	131	70-130	*	50.0	62.6	125		5	20	
Benzene	50.0	49.5	99	80-120		50.0	48.4	97		2	20	
Bromobenzene	50.0	49.5	99	75-125		50.0	48.1	96		3	20	
Bromochloromethane	50.0	59.5	119	70-130		50.0	57.7	115		3	20	
Bromodichloromethane	50.0	62.2	124	75-120	*	50.0	60.8	122	*	2	20	
Bromoform	50.0	85.6	171	70-130	*	50.0	85.2	170	*	1	20	
Bromomethane	50.0	53.5	107	68-135		50.0	46.5	93		14	20	
2-Butanone	50.0	52.0	104	70-148		50.0	50.8	102		2	20	
n-Butylbenzene	50.0	53.0	106	70-133		50.0	51.0	102		4	20	
sec-Butylbenzene	50.0	52.9	106	70-125		50.0	51.2	102		4	20	
tert-Butylbenzene	50.0	51.5	103	70-130		50.0	50.4	101		2	20	
Carbon Disulfide	50.0	60.2	120	70-130		50.0	59.9	120		0	20	
Carbon Tetrachloride	50.0	54.8	110	70-130		50.0	51.6	103		7	20	
Chlorobenzene	50.0	51.5	103	80-120		50.0	50.6	101		2	20	
Chloroethane	50.0	55.1	110	61-130		50.0	47.0	94		16	20	
Chloroform	50.0	53.8	108	80-120		50.0	52.5	105		3	20	
Chloromethane	50.0	57.5	115	67-125		50.0	59.4	119		3	20	
2-Chlorotoluene	50.0	51.6	103	75-125		50.0	49.8	100		3	20	
1,2-Dibromo-3-chloropropane (SIM)	50.0	88.2	176	70-130	*	50.0	86.6	173	*	2	20	
Dibromochloromethane	50.0	65.4	131	70-130	*	50.0	67.1	134	*	2	20	
Dibromomethane	50.0	51.4	103	75-125		50.0	50.7	101		2	20	
1,2-Dichlorobenzene	50.0	51.3	103	70-120		50.0	51.0	102		1	20	
1,3-Dichlorobenzene	50.0	53.0	106	75-125		50.0	52.1	104		2	20	
1,4-Dichlorobenzene	50.0	50.6	101	75-125		50.0	49.6	99		2	20	
Dichlorodifluoromethane	50.0	49.6	99	70-136		50.0	46.8	94		5	20	
1,1-Dichloroethane	50.0	55.6	111	70-130		50.0	53.9	108		3	20	
1,2-Dichloroethane	50.0	46.3	93	70-130		50.0	45.1	90		3	20	
1,1-Dichloroethene	50.0	44.7	89	78-120		50.0	44.7	89		0	20	
cis-1,2-Dichloroethene	50.0	53.7	107	70-125		50.0	51.7	103		4	20	
trans-1,2-Dichloroethene	50.0	47.8	96	70-130		50.0	45.9	92		4	20	
1,2-Dichloropropane	50.0	56.1	112	80-121		50.0	54.6	109		3	20	
cis-1,3-Dichloropropene	50.0	62.8	126	70-130		50.0	62.5	125		1	20	

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368 F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584

RSN: VM22F15A-221680617100135



Order ID: A08975 Page: 8 of 9 Date: 06/17/22

VM22F15A: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Am	ount			Qualifier	Spike Amoun	t Result	Rec.	Qualifier			Qualifier
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
trans-1,3-Dichloropropene	50.0	69.3	139	70-132	*	50.0	69.0	138	*	1	20	
Ethylbenzene	50.0	52.0	104	80-120		50.0	50.7	101		3	20	
Ethylene Dibromide	50.0	52.1	104	80-120		50.0	52.7	105		1	20	
2-Hexanone	50.0	62.5	125	70-130		50.0	61.3	123		2	20	
Isopropylbenzene	50.0	52.4	105	75-125		50.0	50.7	101		4	20	
4-Methyl-2-pentanone	50.0	84.3	169	70-130	*	50.0	78.4	157	*	7	20	
Methylene Chloride	50.0	55.8	112	70-130		50.0	53.5	107		5	20	
2-Methylnaphthalene	50.0	52.3	105	70-130		50.0	48.6	97		8	20	
MTBE	50.0	51.5	103	70-125		50.0	52.2	104		1	20	
Naphthalene	50.0	48.4	97	70-130		50.0	46.6	93		4	20	
n-Propylbenzene	50.0	53.9	108	70-130		50.0	51.7	103		5	20	
Styrene	50.0	48.0	96	70-130		50.0	46.5	93		3	20	
1,1,1,2-Tetrachloroethane	50.0	63.9	128	80-130		50.0	64.8	130		2	20	
1,1,2,2-Tetrachloroethane	50.0	66.2	132	70-130	*	50.0	66.0	132	*	0	20	
Tetrachloroethene	50.0	47.5	95	70-130		50.0	47.3	95		0	20	
Toluene	50.0	54.0	108	80-120		50.0	51.0	102		6	20	
1,2,4-Trichlorobenzene	50.0	48.7	97	70-130		50.0	46.8	94		3	20	
1,1,1-Trichloroethane	50.0	54.2	108	70-130		50.0	53.4	107		1	20	
1,1,2-Trichloroethane	50.0	51.2	102	75-125		50.0	52.9	106		4	20	
Trichloroethene	50.0	44.5	89	71-125		50.0	44.3	89		0	20	
Trichlorofluoromethane	50.0	51.9	104	70-133		50.0	46.5	93		11	20	
1,2,3-Trichloropropane	50.0	54.4	109	75-125		50.0	53.6	107		2	20	
1,2,3-Trimethylbenzene	50.0	50.8	102	70-130		50.0	50.2	100		2	20	
1,2,4-Trimethylbenzene	50.0	52.1	104	75-130		50.0	50.9	102		2	20	
1,3,5-Trimethylbenzene	50.0	51.6	103	75-130		50.0	49.9	100		3	20	
Vinyl Chloride	50.0	57.1	114	74-125		50.0	52.2	104		9	20	
m&p-Xylene	100	102	102	75-130		100	98.5	98		4	20	
o-Xylene	50.0	51.5	103	80-120		50.0	50.1	100		3	20	
4-Bromofluorobenzene(S)			99	80-120				98				
Dibromofluoromethane(S)			110	80-120				108				
1,2-Dichloroethane-d4(S)			101	80-120				99				
Toluene-d8(S)			105	80-120				102				

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Order ID: A08975 Page: 9 of 9 Date: 06/17/22

Definitions/ Qualifiers:

- U: The analyte was not detected at or above the Reporting Limit (RL).
- *: Value reported is outside QC limits

Exception Summary:

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

Report Generated By:

By Sue Ricketts at 10:02 AM, Jun 17, 2022

RSN: VM22F15A-221680617100135



Analytical Laboratory

Fax: 231 775 8584

1914 Holloway Drive

8660 S. Mackinaw Trail Holf, MI 48842 Cadillac, MI 49601 Phone: 231 775 8368 Phone: 517 699 0345

Fax: 517 699 0388 email: lab@fibertec.us Geoprobe

11766 E. Grand River Rd. Brighton, MI 48116 Phone: 810 220 3300 Fax: 810 220 3311

Chain of Custody # 203194 PAGE ___ of ___

Client Nam	ie: Arc	adis					PARAMETERS		Matrix Code	Deliverables
Contact Pe	erson: St	aces	Hannula						S Soil Gw Ground Water	Level 2
Project Na	me/Number:	2003 Hord	30136112	(CODE)		4		PLE	A Air Sw Surface Water O Oil ww Waste Water	Level 3
Email distri	oution list: s	tacey ohn.	Mannula@arcads.com mcinnis@arcadus.com	MATRIX (SEE RIGHT CORNER FOR CODE)	# OF CONTAINERS	8260P		HOLD SAMPLE	P Wipe X Other: Specify	EDD
Quote#				(SEE RIC	NO N	1				
Purchase (Order#	30136	1		N. P.	8				
Date	Time	Sample #			1		++++		Remarks:	
6.8	0935		OW-1602_060822	GW	3	X		\perp	48hr TAT	
1	1100		OW-16/1/21_060822	GW	-	×			48hr TAT	
	1110		FIELDBLANK	M	3	×			standard TAT	
	1112		EQUIPMENT BLANK	W	3	*			standard TAT	
1	_	_	TRIP BLANK	W	3	×			Standard TAT	
									Received By	Lab
									JUN 0 8 20	22
									Initials:	5
Commen	rs:							74.		
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Relinquish Relinquish	1000				e/ Tim		Was	11	Shad 6/8/22	3:00
	Was	U	urnaround Time ALE RESULTS WILL BE SENT BY THE END	OF THE B	Q/ JUSINE	2 2 SS D	16:30 Rependent	70	LAB USE ONLY	
	bus, day	2	bus. days3 bus. days	_		bus. c		Fibertec pr	piect number: A and a D	ceived
<u>3</u> 5-7	⁷ bus, days (sto	andard)	Other (specify time/date requirement):							n Ice
			Ple	ase se	e bo	ack	r terms and conditio	ons		



Thursday, July 14, 2022

Fibertec Project Number: A09642

Project Identification: TRW Milford (30136112) /30136112

Submittal Date: 07/11/2022

Ms. Stacey Hannula Arcadis U.S., Inc. - Novi 28550 Cabot Drive Suite 500 Novi, MI 48377

Dear Ms. Hannula,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

By Bailey Welch at 2:53 PM, Jul 14, 2022

Bailey Welch

For Daryl P. Strandbergh Laboratory Director

Enclosures



Order: A09642 Date: 07/14/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2_071122 Chain of Custody: 205973

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 07/11/22

Client Project No: 30136112 Sample Matrix: Ground Water Collect Time: 09:43

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS

Aliquot ID: A09642-001 Matrix: Ground Water

Method: EPA 5030C/EPA 8260D

Description: OW-16D2_071122

						Prepa			alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	lnit.
1. Acetone	U	L-	μg/L	50	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC
2. Acrylonitrile	U		μg/L	2.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC
3. Benzene	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC
4. Bromobenzene	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC
5. Bromochloromethane	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC
6. Bromodichloromethane	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC
7. Bromoform	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
8. Bromomethane	U		μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
9. 2-Butanone	U		μg/L	25	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
10. n-Butylbenzene	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
11. sec-Butylbenzene	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
12. tert-Butylbenzene	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
13. Carbon Disulfide	U		μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
15. Chlorobenzene	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
16. Chloroethane	U		μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SN
17. Chloroform	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
18. Chloromethane	U		μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
19. 2-Chlorotoluene	U		μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SN
21. Dibromochloromethane	U		μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
22. Dibromomethane	U		μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SN
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
27.1,1-Dichloroethane	3.5		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
28. 1,2-Dichloroethane	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
29. 1,1-Dichloroethene	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
30. cis-1,2-Dichloroethene	18		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SN
35. Ethylbenzene	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO
36. Ethylene Dibromide	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SN
37.2-Hexanone	U		μg/L	50	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNO

1914 Holloway Drive 11766 E Grand River 8660 S Madkinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order: A09642 Date: 07/14/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2_071122 Chain of Custody: 205973

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 07/11/22

Client Project No: 30136112 Sample Matrix: Ground Water Collect Time: 09:43

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS

Aliquot ID: A09642-001 Matrix: Ground Water

Method: EPA 5030C/EPA 8260D

Description: OW-16D2_071122

					Prepa	ration	An	alysis	
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	lnit.
38. Isopropylbenzene	U	μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC
39. 4-Methyl-2-pentanone	U	μg/L	50	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC
40. Methylene Chloride	U	μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC
‡ 41.2-Methylnaphthalene	U	μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC
42.MTBE	U	μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC
43. Naphthalene	U	μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC
44. n-Propylbenzene	U	μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC
45. Styrene	U	μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC
46.1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC
47.1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC
48. Tetrachloroethene	U	μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC
49. Toluene	U	μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC
50.1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC
‡ 52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC
53. Trichloroethene	U	μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC
55.1,2,3-Trichloropropane	U	μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC
\$ 56.1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC
57. 1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC
58.1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC
59. Vinyl Chloride	U	μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC
60. m&p-Xylene	U	μg/L	2.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC
61. o-Xylene	U	μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC
\$ 62. Xylenes	U	μg/L	3.0	1.0	07/12/22	VM22G12B	07/12/22 14:32	VM22G12B	SNC



Order: A09642 Date: 07/14/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2R1_071122 Chain of Custody: 205973

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 07/11/22

Client Project No: 30136112 Sample Matrix: Ground Water Collect Time: 10:42

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS

Aliquot ID: A09642-002 Matrix: Ground Water

Method: EPA 5030C/EPA 8260D

Description: OW-16D2R1_071122

1. Acetone U L- μg/L 50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 2. Acrylonitrile U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 3. Benzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 4. Bromobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 5. Bromochloromethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 6. Bromodichloromethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 7. Bromoform U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 8. Bromomethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 8. Bromomethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 9.2-Butanone U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 10. n-Butylbenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 11. sec-Butylbenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 12. tert-Butylbenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 13. Carbon Disulfide U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 14. Carbon Tetrachloride U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 15. Chlorobethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 16. Chlorobethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 17. Chloroform U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 18. Chloromethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 18. Chloromethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 18. Chloromethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 18. Chloromethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 18. Chloromethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 18. Chloromethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 18. Chloromethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19.2-Chlorotoluene							Prepa	ration	An	alysis	
2. Acrylonitrile	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
3. Benzene	1. Acetone	U	L-	μg/L	50	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
Bromobenzene	‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
5. Bromochloromethane U µg/L 1.0 1.0 0.7/12/22 VM22G12B 0.7/12/22 15:00 VM22G12B SN 7/12/22 15:00 VM22G12B	3. Benzene	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
6. Bromodichloromethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 7. Bromoform U μg/L 1.0 0.7/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 9. Paufanone U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 10. n-Bulythenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 11. sec-Bulythenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 12. ter-Bulythenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 13. Carbon Disulfide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 14. Carbon Tetrachloride U μg/L 1.0 07/12/22 VM22G12B 07/12/22 15	4. Bromobenzene	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
7. Bromoform U µg/L 1.0 1.0 07/12/22 VM22G12B SO 7/12/22 15:00 VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B SN VM22G12B	5. Bromochloromethane	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
8. Bromomethane U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 10. Psutyloenzene U µg/L 25 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 10. Psutyloenzene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 11. Sec-Butyloenzene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 12. tent-Butyloenzene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 13. Carbon Disulfide U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 14. Carbon Tetrachloride U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 14. Carbon Tetrachloride U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 15. Chlorobenzene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 16. Chlorotenane U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 18. Chlorotenane U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 18. Chlorotenane U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 18. Chlorotenane U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 18. Chlorotenane U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 20.1,2-Dibromo-3-chloropropane (SIM) U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 20.1,2-Dibromo-3-chloropropane (SIM) U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 22. Dibromomethane U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 23. 1,2-Dichlorobenzene U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 23. 1,2-Dichlorobenzene U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 24. 1,3-Dichlorobenzene U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 25. 1,4-Dichlorobenzene U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 25. 1,4-Dichlorobenzene U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 25. 1,4-Dichlorobenzene U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 25. 1,4-Dichlorobenzene U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 25. 1,4-Dichlorobenzene U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G	6. Bromodichloromethane	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
9.2-Butanone U µg/L 25 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 10.n-Butybenzene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 11.sec-Butybenzene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 11.sec-Butybenzene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 12.ter-Butybenzene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 13. Carbon Disulfide U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 14. Carbon Tetrachloride U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 15. Chlorobenzene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 16. Chlorobenzene U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 17. Chloroform U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 18. Chloromethane U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 18. Chloromethane U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 18. Chloromethane U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 20.1.2-Dibromo-3-chloropropane (SIM) U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 20.1.2-Dibromo-3-chloropropane (SIM) U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 22. Dibromomethane U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 22. Dibromomethane U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 22. Dibromomethane U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 22. Dibromomethane U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 22. Dibromomethane U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 24.1.3-Dichlorobenzene U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/21 15:00 VM22G12B SN 24.1.3-Dichlorobenzene U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/21 15:00 VM22G12B SN 25.1.1-Dichlorobenzene U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/21 15:00 VM22G12B SN 25.1.1-Dichlorobenzene U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/21 15:00 VM22G12B SN 25.1.1-Dichlorobenae U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/21 15:00 VM22G12B SN 25.1.1-Dichlorobenae U µg/L	7. Bromoform	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
10. n-Butylbenzene	8. Bromomethane	U		μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
11. sec-Butybenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 12. tert-Butybenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 13. Carbon Disulfide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 14. Carbon Tetrachloride U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 15. Chlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 16. Chloroethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 17. Chloroform U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 17. Chloroform U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19.2-Chlorotoluene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19.2-Chlorotoluene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19.2-Chlorotoluene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19.2-Chlorotoluene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19.2-Chlorotoluene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 21. Dibromo-3-chloropropane (SIM) U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 22.1 Dibromomethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 23. 1,2-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 24. 1,3-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 25. 1,4-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 25. 1,4-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 25. 1,1-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 26. 1,2-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 27. 1,1-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 28. 1,2-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 28. 1,2-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 31. trans-1,2-Dichloropropene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B S	9.2-Butanone	U		μg/L	25	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
12. tert-Butylbenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 13. Carbon Disulfide U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 14. Carbon Tetrachloride U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 14. Carbon Tetrachloride U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 15. Chlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 16. Chloroethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 17. Chloroform U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 18. Chloromethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotolune U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotolune U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotolune U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 20. 1,2-Dibromo-3-chloropropane (SIM) U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 21. Dibromochloromethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 22. Dibromochloromethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 23. 1,2-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 23. 1,3-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 25. 1,4-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 25. 1,4-Dichloroethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 27. 1,1-Dichloroethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 28. 1,2-Dichloroethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 29. 1,1-Dichloroethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 29. 1,1-Dichloroethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 29. 1,1-Dichloroethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 29. 1,1-Dichloroethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 29. 1,1-Dichloroethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 1	10. n-Butylbenzene	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
13. Carbon Disulfide	11. sec-Butylbenzene	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
14. Carbon Tetrachloride U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 15. Chlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 16. Chloroethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 17. Chloroform U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 18. Chloromethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotoluene U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 21. Dibromo-3-chloropropane (SIM) U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 21. Dibromo-dhloromethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN	12. tert-Butylbenzene	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
15. Chlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 16. Chloroethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 17. Chloroform U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 18. Chloromethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotoluene U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotoluene U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotoluene U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotoluene U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotoluene U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotoluene U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotoluene U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotolenene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotolenene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotolenene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotolenene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotolenene U μg/L 1.0 0.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotolenene U μg/L 1.0 0.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotolenene U μg/L 1.0 0.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotethane U μg/L 1.0 0.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotethane U μg/L 1.0 0.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotethane U μg/L 1.0 0.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotethane U μg/L 1.0 0.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotethane U μg/L 1.0 0.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotethane U μg/L 1.0 0.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotethane U μg/L 1.0 0.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotethane U μg/L 1.0 0.0 07/12/22 VM22G1	13. Carbon Disulfide	U		μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
16. Chloroethane U µg/L 5.0 1.0 07/12/22 VM22G12B S7/12/22 15:00 VM22G12B SN 17. Chloroform U µg/L 1.0 1.0 07/12/22 VM22G12B S7/12/22 15:00 VM22G12B SN 18. Chloromethane U µg/L 5.0 1.0 07/12/22 VM22G12B S7/12/22 15:00 VM22G12B SN 19. 2-Chlorotoluene U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 20. 1,2-Dibromo-3-chloropropane (SIM) U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 21. Dibromochloromethane U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 22. Dibromomethane U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 23. 1,2-Dichlorobenzene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 25. 1,4-Dichlorobenzene U µg/L	14. Carbon Tetrachloride	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
17. Chloroform U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 18. Chloromethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19. 2-Chlorotoluene U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 20. 1,2-Dibromo-3-chloropropane (SIM) U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 21. Dibromochloromethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 22. Dibromomethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 23. 1,2-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 24. 1,3-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 25. 1,4-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 25. 1,4-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 26. Dichlorodifluoromethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 27. 1,1-Dichlorobethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 27. 1,1-Dichloroethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 28. 1,2-Dichloroethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 28. 1,2-Dichloroethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 29. 1,1-Dichloroethene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 30. cis-1,2-Dichloroethene 10 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 31. trans-1,2-Dichloroethene 10 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 31. trans-1,2-Dichloroethene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 31. trans-1,2-Dichloropropene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 33. cis-1,3-Dichloropropene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 33. cis-1,3-Dichloropropene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 34. trans-1,3-Dichloropropene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 35. Ethylbenzene	15. Chlorobenzene	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
18. Chloromethane U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 19.2-Chlorotoluene U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 20.1,2-Dibromo-3-chloropropane (SIM) U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 21. Dibromochloromethane U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 22. Dibromomethane U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 23. 1,2-Dichlorobenzene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 24. 1,3-Dichlorobenzene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 25. 1,4-Dichlorobenzene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 26. Dichlorodifluoromethane U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 27. 1,1-Dichloroethane U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 28. 1,2-Dichloroethane U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 28. 1,2-Dichloroethane U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 28. 1,2-Dichloroethene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 30. cis-1,2-Dichloroethene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 31. trans-1,2-Dichloroethene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 31. trans-1,2-Dichloroethene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 31. trans-1,2-Dichloroethene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 32. 1,2-Dichloropropene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 33. cis-1,3-Dichloropropene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 34. trans-1,3-Dichloropropene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 34. trans-1,3-Dichloropropene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 34. trans-1,3-Dichloropropene U µg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 35. Ethylene Dibromide U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/21 5:00 VM22G12B SN	16. Chloroethane	U		μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
19.2-Chlorotoluene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 20.1,2-Dibromo-3-chloropropane (SIM) U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 21. Dibromochloromethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 22. Dibromomethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 23. 1,2-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 24. 1,3-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 25. 1,4-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 26. Dichlorodifluoromethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 26. Dichlorodifluoromethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 27. 1,1-Dichloroethane 2.2 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 28. 1,2-Dichloroethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 29. 1,1-Dichloroethene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 30. cis-1,2-Dichloroethene 20 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 31. trans-1,2-Dichloroethene 1.2 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 32. 1,2-Dichloropropane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 33. cis-1,3-Dichloropropene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 34. trans-1,3-Dichloropropene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 35. Ethylbenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 36. Ethylene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN	17. Chloroform	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
20.1,2-Dibromo-3-chloropropane (SIM) U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 21. Dibromochloromethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 22. Dibromomethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 23.1,2-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 24.1,3-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 25.1,4-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 26. Dichlorodifluoromethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 27.1,1-Dichloroethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 28.1,2-Dichloroethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 29.1,1-Dichloroethene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 30. cis-1,2-Dichloroethene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 31. trans-1,2-Dichloroethene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 31. trans-1,2-Dichloroethene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 33. cis-1,3-Dichloropropene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 33. cis-1,3-Dichloropropene U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 34. trans-1,3-Dichloropropene U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 35. Ethylbenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 36. Ethylpene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 36. Ethylpene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 36. Ethylpene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 36. Ethylpene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 36. Ethylpene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 36. Ethylpene Dibromide U μg/L 1.0 1.0 07/12/22 07/12/22 15:00 VM22G12B SN 36. Ethylpene Dibromide U μg/L 1.0 1.0 07/12/22 07/12/22 15:00 VM22G12B SN 36. Ethylpene Dibromi	18. Chloromethane	U		μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
21. Dibromochloromethane U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 22. Dibromomethane U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 23. 1,2-Dichlorobenzene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 24. 1,3-Dichlorobenzene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 25. 1,4-Dichlorobenzene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 26. Dichlorodifluoromethane U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 27. 1,1-Dichloroethane U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 28. 1,2-Dichloroethane U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 29. 1,1-Dichloroethane U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 29. 1,1-Dichloroethene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 30. cis-1,2-Dichloroethene 20 µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 31. trans-1,2-Dichloroethene 1.2 µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 31. trans-1,2-Dichloropropene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 32. 1,2-Dichloropropene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 33. cis-1,3-Dichloropropene U µg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 34. trans-1,3-Dichloropropene U µg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 35. Ethylbenzene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 36. Ethylene Dibromide U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 36. Ethylene Dibromide	19. 2-Chlorotoluene	U		μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
22. Dibromomethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 23. 1,2-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 24. 1,3-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 25. 1,4-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 26. Dichlorodifluoromethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 27. 1,1-Dichloroethane 2.2 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 28. 1,2-Dichloroethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 29. 1,1-Dichloroethene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 30. cis-1,2-Dichloroethene 20 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN	‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
23. 1,2-Dichlorobenzene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 24. 1,3-Dichlorobenzene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 25. 1,4-Dichlorobenzene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 26. Dichlorodifluoromethane U µg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 27. 1,1-Dichloroethane 2.2 µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 28. 1,2-Dichloroethane U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 29. 1,1-Dichloroethane U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 29. 1,1-Dichloroethene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 30. cis-1,2-Dichloroethene 20 µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 31. trans-1,2-Dichloroethene 1.2 µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 32. 1,2-Dichloropropane U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 33. cis-1,3-Dichloropropane U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 34. trans-1,3-Dichloropropene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 35. Ethylbenzene U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 36. Ethylene Dibromide U µg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 36. Ethylene Dibromide	21. Dibromochloromethane	U		μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
24. 1,3-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 25. 1,4-Dichlorobenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 26. Dichlorodifluoromethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 27. 1,1-Dichloroethane 2.2 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 28. 1,2-Dichloroethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 29. 1,1-Dichloroethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 30. cis-1,2-Dichloroethene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 31. trans-1,2-Dichloroethene 20 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 31. trans-1,2-Dichloroethene 1.2 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 32. 1,2-Dichloropropane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 33. cis-1,3-Dichloropropene U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 34. trans-1,3-Dichloropropene U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 34. trans-1,3-Dichloropropene U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 35. Ethylbenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 36. Ethylene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN	22. Dibromomethane	U		μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
25. 1,4-Dichlorobenzene U μg/L 5. 0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 26. Dichlorodifluoromethane U μg/L 5. 0 1. 0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 27. 1,1-Dichloroethane 2.2 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 28. 1,2-Dichloroethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 29. 1,1-Dichloroethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 30. cis-1,2-Dichloroethene 20 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 31. trans-1,2-Dichloroethene 1.2 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 32. 1,2-Dichloroptopane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 33. cis-1,3-Dichloroptopane U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 34. trans-1,3-Dichloropropene U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 34. trans-1,3-Dichloropropene U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 35. Ethylbenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 36. Ethylene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN	23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
26. Dichlorodifluoromethane U μg/L 5.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 27. 1,1-Dichloroethane 22. μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 28. 1,2-Dichloroethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 29. 1,1-Dichloroethene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 30. cis-1,2-Dichloroethene 20 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 31. trans-1,2-Dichloroethene 1.2 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 32. 1,2-Dichloropropane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 33. cis-1,3-Dichloropropene U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 34. trans-1,3-Dichloropropene U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 35. Ethylbenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 36. Ethylene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN	24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
27. 1,1-Dichloroethane 2.2 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 28. 1,2-Dichloroethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 29. 1,1-Dichloroethene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 30. cis-1,2-Dichloroethene 20 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 31. trans-1,2-Dichloroethene 1.2 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 32. 1,2-Dichloropropane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 33. cis-1,3-Dichloropropene U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 34. trans-1,3-Dichloropropene U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 35. Ethylene Dibromide U μg/L	25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
28. 1,2-Dichloroethane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 29. 1,1-Dichloroethene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 30. cis-1,2-Dichloroethene 20 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 31. trans-1,2-Dichloroethene 1.2 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 32. 1,2-Dichloropropane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 33. cis-1,3-Dichloropropane U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 34. trans-1,3-Dichloropropene U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 35. Ethylbenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 36. Ethylene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN	26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
29. 1,1-Dichloroethene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 30. cis-1,2-Dichloroethene 20 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 31. trans-1,2-Dichloroethene 1.2 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 32. 1,2-Dichloropropane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 33. cis-1,3-Dichloropropane U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 34. trans-1,3-Dichloropropene U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 35. Ethylbenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 36. Ethylene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN	27.1,1-Dichloroethane	2.2		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
30. cis-1,2-Dichloroethene 20 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 31. trans-1,2-Dichloroethene 1.2 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 32. 1,2-Dichloropropane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 33. cis-1,3-Dichloropropene U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 34. trans-1,3-Dichloropropene U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 35. Ethylbenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 36. Ethylene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN	28.1,2-Dichloroethane	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
31. trans-1,2-Dichloroethene 1.2 μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 32. 1,2-Dichloropropane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 33. cis-1,3-Dichloropropene U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 34. trans-1,3-Dichloropropene U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 35. Ethylbenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 36. Ethylene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN	29.1,1-Dichloroethene	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
32. 1,2-Dichloropropane U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 33. cis-1,3-Dichloropropene U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 34. trans-1,3-Dichloropropene U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 35. Ethylbenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 36. Ethylene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN	30. cis-1,2-Dichloroethene	20		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
33. cis-1,3-Dichloropropene U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 34. trans-1,3-Dichloropropene U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 35. Ethylbenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 36. Ethylene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN	31. trans-1,2-Dichloroethene	1.2		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
34. trans-1,3-Dichloropropene U μg/L 0.50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 35. Ethylbenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 36. Ethylene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 36. Ethylene Dibromide	32.1,2-Dichloropropane	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
35. Ethylbenzene U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 36. Ethylene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 37/12/22 15:00 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 07/12/22 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 07/12/22 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 07/12/22 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 07/12/22 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 07/12/22 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 07/12/22 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 07/12/22 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 07/12/22 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 07/12/22 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 07/12/22 VM22G12B SN 38. Ethylene Dibromide U μg/L 1.0 07/12/22 VM22G12B SN 38. Ethylene Dibromide U μg/	33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
36. Ethylene Dibromide U μg/L 1.0 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN	34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
7777	35. Ethylbenzene	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
37.2-Hexanone U μg/L 50 1.0 07/12/22 VM22G12B 07/12/22 15:00 VM22G12B SN	36. Ethylene Dibromide	U		μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
	37.2-Hexanone	U		μg/L	50	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC

1914 Holloway Drive 11766 E Grand River 8660 S Madkinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order: A09642 Date: 07/14/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2R1_071122 Chain of Custody: 205973

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 07/11/22

Client Project No: 30136112 Sample Matrix: Ground Water Collect Time: 10:42

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS

Aliquot ID: A09642-002 Matrix: Ground Water

Method: EPA 5030C/EPA 8260D

Description: OW-16D2R1_071122

					Prepa	ration	An	alysis	
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
38. Isopropylbenzene	U	μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
39. 4-Methyl-2-pentanone	U	μg/L	50	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
40. Methylene Chloride	U	μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
‡ 41.2-Methylnaphthalene	U	μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
42. MTBE	U	μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
43. Naphthalene	U	μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
44. n-Propylbenzene	U	μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
45. Styrene	U	μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
46. 1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
47.1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
48. Tetrachloroethene	U	μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
49. Toluene	U	μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
50. 1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
‡ 52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
53. Trichloroethene	U	μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
55. 1,2,3-Trichloropropane	U	μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
‡ 56.1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
57.1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
58. 1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
59. Vinyl Chloride	U	μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
60. m&p-Xylene	U	μg/L	2.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
61. o-Xylene	U	μg/L	1.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC
‡ 62. Xylenes	U	μg/L	3.0	1.0	07/12/22	VM22G12B	07/12/22 15:00	VM22G12B	SNC



Order: Date:

A09642 07/14/22

Chain of Custody: Client Identification: Arcadis U.S., Inc. - Novi FIELD BLANK _071122 205973 Sample Description:

Client Project Name: TRW Milford (30136112) Collect Date: 07/11/22 Sample No:

Client Project No: 30136112 Sample Matrix: Blank: Field Collect Time: 10:10

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Aliquot ID: A09642-003 Matrix: Blank: Field Method: EPA 5030C/EPA 8260D Description: FIELD BLANK _071122

						Prepa			alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U	L-	μg/L	50	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
3. Benzene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
4. Bromobenzene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
5. Bromochloromethane	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
6. Bromodichloromethane	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
7. Bromoform	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
8. Bromomethane	U		μg/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
9. 2-Butanone	U		μg/L	25	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
10. n-Butylbenzene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
11. sec-Butylbenzene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
12. tert-Butylbenzene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
13. Carbon Disulfide	U		μg/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
15. Chlorobenzene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
16. Chloroethane	U		μg/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
17. Chloroform	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
18. Chloromethane	U		μg/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
19. 2-Chlorotoluene	U		μg/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
21. Dibromochloromethane	U		μg/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
22. Dibromomethane	U		μg/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
24.1,3-Dichlorobenzene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
28. 1,2-Dichloroethane	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
29.1,1-Dichloroethene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
35. Ethylbenzene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRO
36. Ethylene Dibromide	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
37. 2-Hexanone	U		μg/L	50	1.0	07/13/22	\/M22C42A	07/13/22 12:26	\/M22C12A	DDC

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T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order: A09642 Date: 07/14/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: FIELD BLANK_071122 Chain of Custody: 205973

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 07/11/22

Client Project No: 30136112 Sample Matrix: Blank: Field Collect Time: 10:10

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS

Aliquot ID: A09642-003 Matrix: Blank: Field

Method: EPA 5030C/EPA 8260D

Description: FIELD BLANK _071122

Parameter(s) 38. Isopropylbenzene 39. 4-Methyl-2-pentanone 40. Methylene Chloride ‡ 41. 2-Methylnaphthalene 42. MTBE 43. Naphthalene	V U U U U U U U U U U U U U U U U U U U	Q Units µg/L µg/L µg/L µg/L µg/L µg/L µg/L	5.0 50 5.0 5.0 5.0	1.0 1.0 1.0 1.0 1.0	P. Date 07/13/22 07/13/22 07/13/22 07/13/22	VM22G13A	A. Date 07/13/22 12:26 07/13/22 12:26 07/13/22 12:26	VM22G13A VM22G13A	BRC BRC
39. 4-Methyl-2-pentanone 40. Methylene Chloride ‡ 41. 2-Methylnaphthalene 42. MTBE	U U U U	µg/L µg/L µg/L µg/L	50 5.0 5.0 5.0	1.0 1.0 1.0	07/13/22 07/13/22 07/13/22	VM22G13A VM22G13A	07/13/22 12:26 07/13/22 12:26	VM22G13A VM22G13A	BRC BRC
40. Methylene Chloride ‡ 41. 2-Methylnaphthalene 42. MTBE	U U U U	µg/L µg/L µg/L	5.0 5.0 5.0	1.0 1.0	07/13/22 07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
‡ 41.2-Methylnaphthalene 42. MTBE	U U U	μg/L μg/L	5.0 5.0	1.0	07/13/22				
42. MTBE	U U U	μg/L	5.0			VM22G13A	07/13/22 12:26		
	U			1.0			01/13/22 12.20	VM22G13A	BRC
43. Naphthalene	U	μg/L			07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
191119			5.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
44. n-Propylbenzene		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
45. Styrene	U	μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
46.1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
47.1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
48. Tetrachloroethene	U	μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
49. Toluene	U	μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
50.1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
‡ 52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
53. Trichloroethene	U	μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
55. 1,2,3-Trichloropropane	U	μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
‡ 56.1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
57.1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
58.1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
59. Vinyl Chloride	U	μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
60. m&p-Xylene	U	μg/L	2.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
61. o-Xylene	U	μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC
‡ 62. Xylenes	U	μg/L	3.0	1.0	07/13/22	VM22G13A	07/13/22 12:26	VM22G13A	BRC



Order: A
Date: 0

205973

A09642 07/14/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: TB005473 Chain of Custody:

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 07/11/22

Client Project No: 30136112 Sample Matrix: Blank: Trip Collect Time: NA

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS	Aliquot ID:	A09642-004	Matrix: Blank: Trip
Method: EPA 5030C/EPA 8260D	Description:	TB005473	

						Prepa			alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	lnit.
1. Acetone	U	L-	μg/L	50	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRC
2. Acrylonitrile	U		μg/L	2.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRC
3. Benzene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRC
4. Bromobenzene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRO
5. Bromochloromethane	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRO
6. Bromodichloromethane	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
7. Bromoform	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
8. Bromomethane	U		μg/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
9.2-Butanone	U		μg/L	25	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
10. n-Butylbenzene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
11. sec-Butylbenzene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
12. tert-Butylbenzene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
13. Carbon Disulfide	U		μg/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
15. Chlorobenzene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
16. Chloroethane	U		μg/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
17. Chloroform	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
18. Chloromethane	U		μg/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
19. 2-Chlorotoluene	U		μg/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
20. 1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
21. Dibromochloromethane	U		μg/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
22. Dibromomethane	U		μg/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
28. 1,2-Dichloroethane	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
29. 1,1-Dichloroethene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
35. Ethylbenzene	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
36. Ethylene Dibromide	U		μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
37.2-Hexanone	U		μg/L	50	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR

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Order: A09642 Date: 07/14/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: TB005473 Chain of Custody: 205973

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 07/11/22

Client Project No: 30136112 Sample Matrix: Blank: Trip Collect Time: NA

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS

Aliquot ID: A09642-004 Matrix: Blank: Trip

Method: EPA 5030C/EPA 8260D

Description: TB005473

					Prepa	ration	An	alysis	
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	lnit.
38. Isopropylbenzene	U	μg/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRO
39. 4-Methyl-2-pentanone	U	μg/L	50	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRC
40. Methylene Chloride	U	μg/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRC
‡ 41.2-Methylnaphthalene	U	μg/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRO
42. MTBE	U	μg/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRO
43. Naphthalene	U	μg/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRO
44. n-Propylbenzene	U	μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRO
45. Styrene	U	μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRO
46. 1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRO
47.1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRO
48. Tetrachloroethene	U	μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
49. Toluene	U	μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRO
50. 1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRO
52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
53. Trichloroethene	U	μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRO
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRO
55. 1,2,3-Trichloropropane	U	μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRO
56. 1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRO
57. 1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRO
58. 1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BR
59. Vinyl Chloride	U	μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRO
60. m&p-Xylene	U	μg/L	2.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRO
61. o-Xylene	U	μg/L	1.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRO
62. Xylenes	U	μg/L	3.0	1.0	07/13/22	VM22G13A	07/13/22 12:54	VM22G13A	BRO

Page:



Analytical Laboratory Report Laboratory Project Number: A09642

Order: A09642 Date: 07/14/22

Definitions/ Qualifiers:

- A: Spike recovery or precision unusable due to dilution.
- **B:** The analyte was detected in the associated method blank.
- E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
- **J:** The concentration is an estimated value.
- M: Modified Method
- **U:** The analyte was not detected at or above the reporting limit.
- X: Matrix Interference has resulted in a raised reporting limit or distorted result.
- W: Results reported on a wet-weight basis.
- *: Value reported is outside QC limits

Exception Summary:

L- : Recovery in the associated laboratory sample (LCS) exceeds the lower control limit. Results may be biased low.

Analysis Locations:

All analyses performed in Holt.



Accreditation Number(s):

T104704518-19-8 (TX)



Order ID: A09642 Page: 1 of 9 Date: 07/14/22

VM22G12B: Method Blank (MB)

Puin Time: VM22G12B MB 07/12/2022 4142 N/M22G12B1

Run Time: VM22G12B.MB 07/12/2022 11:43			<u> </u>	
	MB Result MB	MB RDL		
		alifier		
Analyte	μg/L	μg/L		
Acetone	U	50		
Acrylonitrile	U	2.0		
Benzene	U	1.0		
Bromobenzene	U	1.0		
Bromochloromethane	U	1.0		
Bromodichloromethane	U	1.0		
Bromoform	U	1.0		
Bromomethane	U	5.0		
2-Butanone	U	25		
n-Butylbenzene	U	1.0		
sec-Butylbenzene	U	1.0		
tert-Butylbenzene	U	1.0		
Carbon Disulfide	U	5.0		
Carbon Tetrachloride	U	1.0		
Chlorobenzene	U	1.0		
Chloroethane	U	5.0		
Chloroform	U	1.0		
Chloromethane	U	5.0		
2-Chlorotoluene	U	5.0		
1,2-Dibromo-3-chloropropane (SIM)	U	1.0		
Dibromochloromethane	U	5.0		
Dibromomethane	U	5.0		
1,2-Dichlorobenzene	U	1.0		
1,3-Dichlorobenzene	U	1.0		
1,4-Dichlorobenzene	U	1.0		
Dichlorodifluoromethane	U	5.0		
1,1-Dichloroethane	U	1.0		
1,2-Dichloroethane	U	1.0		
1,1-Dichloroethene	U	1.0		
cis-1,2-Dichloroethene	U	1.0		
trans-1,2-Dichloroethene	U	1.0		
1,2-Dichloropropane	U	1.0		
cis-1,3-Dichloropropene	U	0.50		
,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
	1914 Holloway Drive	Hblt. MI 48842		T: (517) 699-0345

 1914 Holloway Drive
 Holt, MI 48842
 T: (517) 699-0345
 F: (517) 699-0388

 11766 E Grand River
 Bighton, MI 48116
 T: (810) 220-3300
 F: (810) 220-3311

 8660 S Maddinaw Trail
 Cadillac, MI 49601
 T: (231) 775-8368
 F: (231) 775-8584



Order ID: A09642 Page: 2 of 9 Date: 07/14/22

VM22G12B: Method Blank (MB)

May MR De MRD Analys pgl yel Innes 1.5 Octobropropene pgl yel Ethylenzor pgl yel Bernory/benzore pgl yel Popply/benzore pgl yel Methylen Chlorid pgl yel Millen Park pgl yel Millen Park pgl yel Millen Park pgl yel Millen Park yel yel <th< th=""><th>Run Time: VM22G12B.MB 07/12/2022 11:43 [VM22G1</th><th>12B]</th><th></th><th></th></th<>	Run Time: VM22G12B.MB 07/12/2022 11:43 [VM22G1	12B]		
Analye pg-L pg-L trans-1,2-Chiloropropene U 0.5 Ethyleno Dibomide U 1.0 2-Heazone U 5.0 Sopropylenzene U 5.0 4-Methyla Pontanone U 5.0 Methylane Chioride U 5.0 4-Methylane Philane U 5.0 MTSE U 5.0 Maphthalene U 5.0 n-Propylenazoe U 1.0 Syrene U 1.0 1,1,2-Tetachloroethane U 1.0 1,1,2-Tetachloroethane U 1.0 1,2-Trichloroethane U 1.0		MB Result	MB	MB RDL
Irans-1 3-Ochloropropene U 0.50 Ethyden Dibromide U 1.0 2-Hoxanne U 50 Bopropylbenzene U 50 4-Methyl-2-pentanone U 50 Methylene Chloride U 50 MED U 50 MTBE U 50 Naphthalene U 50 Nophthalene U 10 Propylbanzene U 10 Styrene U 10 1,1,1,2-Fetrachlorosthane U 10 1,1,1,2-Fetrachlorosthane U 1.0 1,2,2-Trickhlorosthane U 1.0 1,2,4-Trickhlorosthane U 1.0 1,2,4-Trickhlorosthane U 1.0 1,2,2-Trickhlorosthane U 1.0 1,2,3-Trickhlorosthane U 1.0 1,2,3-Trickhlorosthane U 1.0 1,2,3-Trickhlorosthane U 1.0 1,2,3-Trickhlorosthane U 1			Qualifier	
Ethyloenzene U 1.0 Ethyloen Dibornide U 5.0 Skopropylbenzene U 5.0 4 Methyl-Zeparlanore U 5.0 Methylene Chlorde U 5.0 2-Methylnaphthalene U 5.0 MTBE U 5.0 Naphthalene U 5.0 N-Propylbenzene U 1.0 Syrene U 1.0 1,1,1,2-Trackhloroethane U 1.0 1,1,2-Trackhloroethane U 1.0 1,2-A-Trickhloroethane U 1.0 1,2-A-Trickhloroethane U 1.0 1,1-1-Trickhloroethane U 1.0 1,1-1-Trickhloroethane U 1.0 1,1-2-Trickhloroethane U 1.0 1,2-A-Trickhloroethane U 1.0 1,2-S-Trickhloroethane U 1.0 1,2-S-Trickhloroethane U 1.0 1,2-S-Trickhloroethane U 1.0 1,2-S-Trinethyloerzene </th <th>Analyte</th> <th>μg/L</th> <th></th> <th>μg/L</th>	Analyte	μg/L		μg/L
Ethylene Dibromide U 50 2-Hexanone U 50 Exporpoylbrazene U 50 4-Methyla-Pentanone U 50 Methylaene Chloride U 50 Abethylaphthalene U 50 MTBE U 50 Naphthalene U 50 Proprylbrache U 1.0 Syrane U 1.0 Syrane U 1.0 Tetrachloroethane U 1.0 Tetrachloroethane U 1.0 Tollane U 1.0 1,1.1-Trichlorotehane U 1.0 1,1.1-Trichlorotehane U 1.0 1,1.1-Trichlorotehane U 1.0 1,1.2-Trichlorotehane U 1.0 1,2.3-Trichloropopane U 1.0 1,2.3-Trichloropopane U 1.0 1,2.4-Trimethylbenzene U 1.0 1,2.4-Trimethylbenzene U 1.0	trans-1,3-Dichloropropene	U		0.50
2-Hexanone U 50 Isopropybenzene U 50 Akethyl-2-pentanone U 50 Methylene Chloride U 50 2-Methylnaphthalene U 50 MTEE U 50 Naphthalene U 50 n-Propybenzene U 1.0 Styene U 1.0 1,1,2-Tetrachloroethane U 1.0 1,1,2-Tetrachloroethane U 1.0 10uene U 1.0 1,2-A-Trichloroethane U 1.0 1,4-1-Trichloroethane U 1.0 1,4-1-Trichloroethane U 1.0 1,4-1-Trichloroethane U 1.0 1,4-1-Trichloroethane U 1.0 1,2-1-Trichloroethane U 1.0 1,2-3-Trichloroptopane U 1.0 1,2-3-Trichloroptopane U 1.0 1,2-4-Trimethylbenzene U 1.0 Vinyl Chioride U 1.	Ethylbenzene	U		1.0
Isopropylbenzene U 50 4-Methyl-2-pentanone U 50 Methylane Chloride U 50 2-Methylnaphthalene U 50 MTBE U 50 Naphthalene U 50 n-Propylbenzene U 1.0 Styrene U 1.0 1.1.1,2-Tetrachloroethane U 1.0 1.2,2-Tetrachloroethane U 1.0 Toluene U 1.0 1.1,4-Trichloroethane U 1.0 1.1,1-Trichloroethane U 1.0 1.1,1-Trichloroethane U 1.0 1.1,2-Trichloroethane U 1.0 1.1,2-Trichloroethane U 1.0 1.1,2-Trichloroethane U 1.0 1.2,3-Trichloropthane U 1.0 1.2,3-Trichloropthane U 1.0 1.2,3-Trichloropthane U 1.0 1.2,3-Trichloropthane U 1.0 1.2,3-Trichloropthane <t< td=""><td>Ethylene Dibromide</td><td>U</td><td></td><td>1.0</td></t<>	Ethylene Dibromide	U		1.0
4-Methyl-2-pentanone U 50 Methylanpthalene U 50 Amethylanpthalene U 50 Naphthalene U 50 Naphthalene U 10 N-Propybenzene U 1.0 Styrene U 1.0 1,1,2-Tetrachloroethane U 1.0 1,2,2-Tetrachloroethane U 1.0 Toluene U 1.0 1,2,4-Trichloroethane U 1.0 1,1,2-Trichloroethane U 1.0 1,1,2-Trichloroethane U 1.0 Trichloroethane U 1.0		U		
Methylene Chloride U 5.0 2-Methylnaphthalene U 5.0 Naphthalene U 5.0 Naphthalene U 5.0 n-Proplenzene U 1.0 Styrene U 1.0 1,1,1,2-Tetachloroethane U 1.0 1,1,2-Tetachloroethane U 1.0 Toluene U 1.0 1,2-4-Trichloroethane U 5.0 1,1,1-Trichloroethane U 1.0 1,1,2-Trichloroethane U 1.0 1,1,2-Trichloroethane U 1.0 1,2,3-Trinchloropropane U 1.0 1,2,3-Trinchloropropane U 1.0 1,2,4-Trimethylbenzene U 1.0 1,3-Trimethylbenzene U 1.0 1,5-Trimethylbenzene U 1.0 1,7-Yellorde U 1.0 1,8-Yellorde U 1.0 1,9-Yellorde U 1.0 1,0-Yellorde U <		U		5.0
2-Methylnaphthalene U 5.0 MTBE U 5.0 Naphthalene U 5.0 N-Propylenzene U 1.0 Styrene U 1.0 1,1,2-Fetrachloroethane U 1.0 1,2-2-Fetrachloroethane U 1.0 Totluene U 1.0 1,2-4-Trichloroethane U 1.0 1,2-4-Trichloroethane U 1.0 1,2-4-Trichloroethane U 1.0 1,2-4-Trichloroethane U 1.0 1,2-3-Trinchloroethane U 1.0 1,3-5-Trinchloroethane U 1.0 1,2-3-Trinchlo		U		50
MTBE U 5.0 Naphtalene U 5.0 n-Propylbenzene U 1.0 Styrene U 1.0 1,1,2-Tetrachloroethane U 1.0 1,2,2-Tetrachloroethane U 1.0 Totluene U 1.0 1,2,4-Trichloroethane U 1.0 1,4-Trichloroethane U 1.0 1,1,2-Trichloroethane U 1.0 1,1,2-Trichloroethane U 1.0 1,2-Trichloroethane U 1.0 1,2-Trichloroethane U 1.0 1,2-Trichloroptopane U 1.0 1,2-Trichloroptopane U 1.0 1,2-Trimethylbenzene U 1.0 1,3-Trimethylbenzene U 1.0 1,3-Trimethylbenzene <t< td=""><td></td><td>U</td><td></td><td></td></t<>		U		
Naphthalene U 5.0 n-Propybenzene U 1.0 Styrene U 1.0 1.1,1.2-Tetrachloroethane U 1.0 1.1,2.2-Tetrachloroethane U 1.0 Tetrachloroethane U 1.0 Toluene U 5.0 1,1,1-Trichloroethane U 1.0 1,1,1-Trichloroethane U 1.0 1,1,1-Trichloroethane U 1.0 1,1,2-Trichloroethane U 1.0 1,2,3-Trichloropropane U 1.0 1,2,3-Trichloropropane U 1.0 1,2,3-Trimethylbenzene U 1.0 1,3,5-Trimethylbenzene U 1.0 1,3,5-Trimethylbenzene U 1.0 Niyl Choiride U		U		
n-Propylbenzene U 1.0 Styrene U 1.0 1.1,2-Tetrachloroethane U 1.0 1.1,2-Zetrachloroethane U 1.0 Tetrachloroethane U 1.0 Toluene U 1.0 1,2-4-Trichlorobenzene U 5.0 1,1,1-Trichloroethane U 1.0 1,1,2-Trichloroethane U 1.0 1,1,2-Trichloroethane U 1.0 Trichloroethane U 1.0 1,2,3-Trichloropropane U 1.0 1,2,3-Trichloropropane U 1.0 1,2,3-Trimethylbenzene U 1.0 1,3,5-Trimethylbenzene U 1.0 1,3,5-Trimethylbenzene U 1.0 m&p-Xylene U 1.0 m&p-Xylene U 2.0 o-Xylene U 1.0		U		5.0
Styrene U 1.0 1.1,2-Tetrachloroethane U 1.0 1,1,2-Tetrachloroethane U 1.0 Tetrachloroethane U 1.0 Toluene U 1.0 1,2,4-Trichlorobenzene U 5.0 1,1,1-Trichloroethane U 1.0 1,1,2-Trichloroethane U 1.0 1,1,2-Trichloroethane U 1.0 Trichlorofluoromethane U 1.0 1,2,3-Trichloropopane U 1.0 1,2,3-Trimethylbenzene U 1.0 1,2,4-Trimethylbenzene U 1.0 1,3,5-Trimethylbenzene U 1.0 1,3,5-Trimethylbenzene U 1.0 1,3,5-Trimethylbenzene U 1.0 m8p-Xylene U 2.0 o-Xylene U 2.0 o-Xylene U 1.0		U		
1,1,2-Tetrachloroethane U 1.0 1,1,2,2-Tetrachloroethane U 1.0 Tetrachloroethene U 1.0 Toluene U 1.0 1,2,4-Trichlorobenzene U 5.0 1,1,1-Trichloroethane U 1.0 1,1,2-Trichloroethane U 1.0 1,1,2-Trichloroethane U 1.0 Trichloroethane U 1.0 Trichloropthuromethane U 1.0 1,2,3-Trichloroptopane U 1.0 1,2,3-Trimethylbenzene U 1.0 1,2,4-Trimethylbenzene U 1.0 Vinyl Chloride U 1.0 Whyl Chloride U 1.0 m&p-Xylene U 2.0 o-Xylene U 1.0				
1,1,2,2-Tetrachloroethane U 1,0 Tetrachloroethane U 1,0 Toluene U 1,0 1,2,4-Trichlorobenzene U 5,0 1,1,1-Trichloroethane U 1,0 1,2-Trichloroethane U 1,0 Trichlorofluoromethane U 1,0 1,2,3-Trinethylbenzene U 1,0 1,2,4-Trimethylbenzene U 1,0 1,3,5-Trimethylbenzene U 1,0 Vinyl Chloride U 1,0 Nylene U 1,0 Vinyl Chloride U 1,0 Nylene				
Tetrachloroethene U 1.0 Toluene U 1.0 1,2,4-Trichlorobenzene U 5.0 1,1,1-Trichloroethane U 1.0 1,1,2-Trichloroethane U 1.0 Trichlorofluoromethane U 1.0 1,2,3-Trichloropropane U 1.0 1,2,3-Trimethylbenzene U 1.0 1,3,5-Trimethylbenzene U 1.0 1,3,5-Trimethylbenzene U 1.0 Vinyl Chloride U 1.0 Vinyl Chloride U 1.0 m&p-Xylene U 2.0 o-Xylene U 1.0	1,1,1,2-Tetrachloroethane	U		1.0
Toluene U 1.0 1,2,4-Trichlorobenzene U 5.0 1,1,1-Trichloroethane U 1.0 1,1,2-Trichloroethane U 1.0 Trichloroethane U 1.0 Trichlorofluoromethane U 1.0 1,2,3-Trichloropropane U 1.0 1,2,3-Trimethylbenzene U 1.0 1,2,4-Trimethylbenzene U 1.0 1,3,5-Trimethylbenzene U 1.0 Vinyl Chloride U 1.0 Winyl Chloride U 1.0 m&p-Xylene U 2.0 o-Xylene U 1.0				
1,2,4-Trichlorobenzene U 5.0 1,1,1-Trichloroethane U 1.0 1,1,2-Trichloroethane U 1.0 Trichloroethane U 1.0 Trichlorofluoromethane U 1.0 1,2,3-Trichloropropane U 1.0 1,2,3-Trimethylbenzene U 1.0 1,2,4-Trimethylbenzene U 1.0 1,3,5-Trimethylbenzene U 1.0 Vinyl Chloride U 1.0 wap-Xylene U 2.0 o-Xylene U 1.0		U		1.0
1,1,1-Trichloroethane U 1.0 1,1,2-Trichloroethane U 1.0 Trichlorofluoromethane U 1.0 1,2,3-Trichloropropane U 1.0 1,2,3-Trimethylbenzene U 1.0 1,2,4-Trimethylbenzene U 1.0 1,3,5-Trimethylbenzene U 1.0 Vinyl Chloride U 1.0 Vinyl Chloride U 1.0 m&p-Xylene U 2.0 o-Xylene U 1.0		U		
1,1,2-Trichloroethane U 1.0 Trichloroethene U 1.0 Trichlorofluoromethane U 1.0 1,2,3-Trichloropropane U 1.0 1,2,3-Trimethylbenzene U 1.0 1,2,4-Trimethylbenzene U 1.0 1,3,5-Trimethylbenzene U 1.0 Vinyl Chloride U 1.0 w&p-Xylene U 2.0 o-Xylene U 1.0		U		
Trichloroethene U 1.0 Trichlorofluoromethane U 1.0 1,2,3-Trichloropropane U 1.0 1,2,3-Trimethylbenzene U 1.0 1,2,4-Trimethylbenzene U 1.0 1,3,5-Trimethylbenzene U 1.0 Vinyl Chloride U 1.0 Vinyl Chloride U 2.0 o-Xylene U 1.0				
Trichlorofluoromethane U 1.0 1,2,3-Trichloropropane U 1.0 1,2,3-Trimethylbenzene U 1.0 1,2,4-Trimethylbenzene U 1.0 1,3,5-Trimethylbenzene U 1.0 Vinyl Chloride U 1.0 w&p-Xylene U 2.0 o-Xylene U 1.0		U		
1,2,3-Trichloropropane U 1.0 1,2,3-Trimethylbenzene U 1.0 1,2,4-Trimethylbenzene U 1.0 1,3,5-Trimethylbenzene U 1.0 Vinyl Chloride U 1.0 m&p-Xylene U 2.0 o-Xylene U 1.0	Trichloroethene	U		
1,2,3-Trimethylbenzene U 1.0 1,2,4-Trimethylbenzene U 1.0 1,3,5-Trimethylbenzene U 1.0 Vinyl Chloride U 1.0 m&p-Xylene U 2.0 o-Xylene U 1.0		U		1.0
1,2,4-Trimethylbenzene U 1.0 1,3,5-Trimethylbenzene U 1.0 Vinyl Chloride U 1.0 m&p-Xylene U 2.0 o-Xylene U 1.0		U		
1,3,5-Trimethylbenzene U 1.0 Vinyl Chloride U 1.0 m&p-Xylene U 2.0 o-Xylene U 1.0		U		1.0
Vinyl Chloride U 1.0 m&p-Xylene U 2.0 o-Xylene U 1.0		U		1.0
m&p-Xylene U 2.0 o-Xylene U 1.0		U		1.0
o-Xylene U 1.0		U		
	m&p-Xylene			
4-Bromofluorobenzene(S) 89 80-120		U		1.0
				80-120
Dibromofluoromethane(S) 89 80-120		89		80-120
1,2-Dichloroethane-d4(S) 114 80-120	1,2-Dichloroethane-d4(S)	114		80-120
Toluene-d8(S) 94 80-120	Toluene-d8(S)	94		80-120

1914 Holloway Drive 11766 E Gand Rver 8660 S Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order ID: A09642
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Date: 07/14/22

VM22G12B: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VM22G12B.LCS: 07/12/2022 10:19	-	2G12B.LCSD: 07/1	_	=								
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Am	ount			Qualifier	•	unt Result	Rec.	Qualifier			Qualifie
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
Acetone	50.0	25.8	52	54-140	*	50.0	25.8	52	*	0	20	
Acrylonitrile	50.0	46.4	93	70-130		50.0	47.2	94		1	20	
Benzene	50.0	46.3	93	80-120		50.0	45.3	91		2	20	
Bromobenzene	50.0	48.1	96	75-125		50.0	47.6	95		1	20	
Bromochloromethane	50.0	47.6	95	70-130		50.0	46.5	93		2	20	
Bromodichloromethane	50.0	43.2	86	75-120		50.0	42.9	86		0	20	
Bromoform	50.0	48.2	96	70-130		50.0	48.8	98		2	20	
Bromomethane	50.0	54.0	108	68-135		50.0	51.6	103		5	20	
2-Butanone	50.0	36.4	73	70-148		50.0	38.3	77		5	20	
n-Butylbenzene	50.0	53.1	106	70-133		50.0	50.4	101		5	20	
sec-Butylbenzene	50.0	52.2	104	70-125		50.0	49.7	99		5	20	
tert-Butylbenzene	50.0	52.0	104	70-130		50.0	50.1	100		4	20	
Carbon Disulfide	50.0	43.5	87	70-130		50.0	36.6	73		18	20	
Carbon Tetrachloride	50.0	41.8	84	70-130		50.0	40.8	82		2	20	
Chlorobenzene	50.0	50.1	100	80-120		50.0	48.9	98		2	20	
Chloroethane	50.0	57.8	116	61-130		50.0	55.9	112		4	20	
Chloroform	50.0	47.0	94	80-120		50.0	45.9	92		2	20	
Chloromethane	50.0	50.3	101	67-125		50.0	47.5	95		6	20	
2-Chlorotoluene	50.0	48.4	97	75-125		50.0	47.6	95		2	20	
1,2-Dibromo-3-chloropropane (SIM)	50.0	47.5	95	70-130		50.0	48.4	97		2	20	
Dibromochloromethane	50.0	43.2	86	70-130		50.0	44.7	89		3	20	
Dibromomethane	50.0	42.8	86	75-125		50.0	42.7	85		1	20	
1,2-Dichlorobenzene	50.0	50.5	101	70-120		50.0	49.8	100		1	20	
1,3-Dichlorobenzene	50.0	50.8	102	75-125		50.0	49.1	98		4	20	
1,4-Dichlorobenzene	50.0	51.0	102	75-125		50.0	49.8	100		2	20	
Dichlorodifluoromethane	50.0	49.2	98	70-136		50.0	45.9	92		6	20	
1,1-Dichloroethane	50.0	47.9	96	70-130		50.0	46.0	92		4	20	
1,2-Dichloroethane	50.0	49.8	100	70-130		50.0	48.9	98		2	20	
1,1-Dichloroethene	50.0	50.3	101	78-120		50.0	43.1	86		16	20	
cis-1,2-Dichloroethene	50.0	48.8	98	70-125		50.0	48.0	96		2	20	
trans-1,2-Dichloroethene	50.0	51.1	102	70-130		50.0	49.4	99		3	20	
1,2-Dichloropropane	50.0	47.4	95	80-121		50.0	46.5	93		2	20	
cis-1,3-Dichloropropene	50.0	41.1	82	70-130		50.0	40.8	82		0	20	

1914 Holloway Drive 11766 E Grand River 8660 S Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order ID: A09642 Page: 4 of 9 Date: 07/14/22

VM22G12B: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Am	ount			Qualifier	Spike Amo	ount Result	Rec.	Qualifier			Qualifier
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
rans-1,3-Dichloropropene	50.0	44.4	89	70-132		50.0	44.8	90		1	20	
Ethylbenzene	50.0	51.5	103	80-120		50.0	49.2	98		5	20	
thylene Dibromide	50.0	44.2	88	80-120		50.0	45.7	91		3	20	
-Hexanone	50.0	47.8	96	70-130		50.0	48.2	96		0	20	
sopropylbenzene	50.0	50.9	102	75-125		50.0	48.5	97		5	20	
-Methyl-2-pentanone	50.0	53.0	106	70-130		50.0	52.3	105		1	20	
lethylene Chloride	50.0	47.2	94	70-130		50.0	45.2	90		4	20	
-Methylnaphthalene	50.0	45.9	92	70-130		50.0	46.8	94		2	20	
<i>I</i> TBE	50.0	47.3	95	70-125		50.0	49.8	100		5	20	
aphthalene	50.0	43.3	87	70-130		50.0	43.3	87		0	20	
-Propylbenzene	50.0	50.9	102	70-130		50.0	49.0	98		4	20	
tyrene	50.0	43.1	86	70-130		50.0	41.9	84		2	20	
1,1,2-Tetrachloroethane	50.0	46.9	94	80-130		50.0	47.2	94		0	20	
1,2,2-Tetrachloroethane	50.0	49.6	99	70-130		50.0	50.2	100		1	20	
etrachloroethene	50.0	49.8	100	70-130		50.0	49.0	98		2	20	
oluene	50.0	48.5	97	80-120		50.0	45.3	91		6	20	
2,4-Trichlorobenzene	50.0	48.3	97	70-130		50.0	47.0	94		3	20	
1,1-Trichloroethane	50.0	43.3	87	70-130		50.0	42.4	85		2	20	
1,2-Trichloroethane	50.0	46.2	92	75-125		50.0	48.5	97		5	20	
richloroethene	50.0	43.7	87	71-125		50.0	42.4	85		2	20	
richlorofluoromethane	50.0	55.3	111	70-133		50.0	54.0	108		3	20	
2,3-Trichloropropane	50.0	51.2	102	75-125		50.0	52.1	104		2	20	
2,3-Trimethylbenzene	50.0	50.4	101	70-130		50.0	48.8	98		3	20	
2,4-Trimethylbenzene	50.0	51.9	104	75-130		50.0	50.2	100		4	20	
3,5-Trimethylbenzene	50.0	51.7	103	75-130		50.0	50.1	100		3	20	
inyl Chloride	50.0	48.9	98	74-125		50.0	45.2	90		9	20	
&p-Xylene	100	99.8	100	75-130		100	95.1	95		5	20	
Xylene	50.0	49.3	99	80-120		50.0	47.3	95		4	20	
4-Bromofluorobenzene(S)			98	80-120				97				
Dibromofluoromethane(S)			93	80-120				93				
1,2-Dichloroethane-d4(S)			111	80-120				110				
Toluene-d8(S)			99	80-120				95				

1914 Holloway Drive 11766 E Grand River 8660 S Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order ID: A09642 Page: 5 of 9 Date: 07/14/22

VM22G13A: Method Blank (MB)

Run Time: VM22G13A.MB 07/13/2022 11:01	[VM22G13A]			
	MB Result	MB MB RDL		
		Qualifier		
Analyte	μg/L	μg/L		
Acetone	U	50		
Acrylonitrile	U	2.0		
Benzene	U	1.0		
Bromobenzene	U	1.0		
Bromochloromethane	U	1.0		
Bromodichloromethane	U	1.0		
Bromoform	U	1.0		
Bromomethane	U	5.0		
2-Butanone	U	25		
n-Butylbenzene	U	1.0		
sec-Butylbenzene	U	1.0		
tert-Butylbenzene	U	1.0		
Carbon Disulfide	U	5.0		
Carbon Tetrachloride	U	1.0		
Chlorobenzene	U	1.0		
Chloroethane	U	5.0		
Chloroform	U	1.0		
Chloromethane	U	5.0		
2-Chlorotoluene	U	5.0		
1,2-Dibromo-3-chloropropane (SIM)	U	1.0		
Dibromochloromethane	U	5.0		
Dibromomethane	U	5.0		
1,2-Dichlorobenzene	U	1.0		
1,3-Dichlorobenzene	U	1.0		
1,4-Dichlorobenzene	U	1.0		
Dichlorodifluoromethane	U	5.0		
1,1-Dichloroethane	U	1.0		
1,2-Dichloroethane	U	1.0		
1,1-Dichloroethene	U	1.0		
cis-1,2-Dichloroethene	U	1.0		
trans-1,2-Dichloroethene	U	1.0		
1,2-Dichloropropane	U	1.0		
cis-1,3-Dichloropropene	U	0.50		
	1914 Holloway Drive	hht MI 48840	T: /517) 699-0345	

1914 Holloway Drive 11766 E Grand River 8660 S Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order ID: A09642 Page: 6 of 9 Date: 07/14/22

VM22G13A: Method Blank (MB)

Key Many Many Tarsi-1 Schlörupprace 9	Run Time: VM22G13A.MB 07/13/2022 11:01 [VM22G1	13A]		
Analyse Ipst Ipst Irans 1.3-Dichlorgropene U 0.50 Ettydenzene U 1.0 Ettydenzene U 50 Febrandene U 50 koprophenzene U 50 Methyl-2 pentanone U 50 Pathyl-1 pentanone U 50 Nephtalene U 10 P-Poysopera U 10 Styrene U 10 11,1-2 Tetackerlorosthane U 10 12-2 Tetackerlorosthane U 10 12-1 Tethorosthane U 10 12-1 Tethorosthane U 10		MB Result	MB	MB RDL
funds. 12-bichloropropene U 0.50 Ethybenzerie U 1.0 Ethybenzerie U 50 2-Hexanne U 50 Bopropolybarzen U 50 4-Methyl-2-pentaone U 50 Mottylen Chloride U 50 Arbeityl-1-pentaone U 50 MTEE U 50 MREE U 50 Naphthalen U 50 N-Propylbanzen U 10 Syrene U 10 1,12-2 Frenchloroethane U 10 1,12-2 Frenchloroethane U 10 1,2-2 Frenchloroethane U 10 1,1-2 Freichrobenzene U 10 1,1-1 Frichbroethane U 10 1,1-2 Frichbroethane U 10 1,2-2 Frichbroepene U 10 1,2-2 Frinderbroene U 10 1,2-2 Frinderbroene U 10			Qualifier	
Ethylenzene U 1.0 Ethylene Dibornide U 5.0 Z-Hexanone U 5.0 lappoplenzene U 5.0 Abethylez-Portlande U 5.0 Methylene Chloride U 5.0 2-Methylaphthalene U 5.0 MTEE U 5.0 Naphthalene U 5.0 Naphthalene U 5.0 Naphthalene U 5.0 Naphthalene U 1.0 1.1.2 Tertachloroethane U 1.0 1.1.2 Tertachloroethane U 1.0 Totuse U 1.0 Totuse U 1.0 1.1.2 Tertichloroethane U 1.0 1.1.2 Tertichloroethane U 1.0 1.1.2 Tertichloroethane U 1.0 1.2.3 Timethyberzzee U 1.0 1.2.3 Timethyberzzee U 1.0 1.3.5 Timethyberzzee U 1.0	Analyte	μg/L		μg/L
Etycen Ditornide U 50 2-texanone U 50 Bopropsylenzene U 50 4 Methy 2-pentanone U 50 Methylene Chloride U 50 2-Methylnaphthalene U 50 MTBE U 50 Naphthalene U 50 n-Propybenzene U 10 Styrene U 10 1,1,2-Testachloroethane U 10 1,1,2-Testachloroethane U 10 Totenchroethene U 10 1,1,4-Trichforoethane U 10 1,1,1-Trichforoethane U 10 1,1,2-Tichforoethane U 10 1,2-3-Trinchforopropane U	trans-1,3-Dichloropropene	U		0.50
2-Hexanone U 50 lospropyberzene U 50 Methyles Chloride U 50 Methyles Chloride U 50 Methylaphthalene U 50 Naphtalene U 50 Nephtalene U 60 Propyberzene U 10 Syene U 10 1,1,2-Fetrachloroethane U 10 1,2-E-Testachloroethane U 10 1,2-E-Testachloroethane U 10 Tolune U 10 Tolune U 10 1,2-E-Trichloroethane U 10 1,1-1-Inkloroethane U 10 1,2-Trichloroethane U 10 1,2-Trichloroethane U 10 1,2-Trichloroethane U 10 1,2-S-Trimetryloenzene U 10 1,2-S-Trimetryloenzene U 10 1,3-S-Trimetryloenzene U 10	Ethylbenzene	U		1.0
Sepropy/Benzane	Ethylene Dibromide	U		1.0
AMethyle-2-pentanone U 50 Methylene Chloride U 5.0 Zehdentynaphthalene U 5.0 MTBE U 5.0 Naphthalene U 5.0 Propylenzane U 1.0 Syrene U 1.0 1,1,2-Tetrachloroethane U 1.0 1,1,2-Tetrachloroethane U 1.0 1,2-A-Trichloroethane U 1.0 1,2-A-Trichloroethane U 1.0 1,1,1-Trichloroethane U 1.0 1,1,1-Trichloroethane U 1.0 1,1,2-Trichloroethane U 1.0 1,1-Trichloroethane U 1.0 1,2-Trimbulybenzene U 1.0 1,2-S-Trimbulybenzene U 1.0 1,2-S-Trimbulybenzene U 1.0 Vily Choide U 1.0 1,3-F-Trimbulybenzene U 1.0 Vily Choide U 1.0 1,3-F-Trimbulybenzene U <td></td> <td>U</td> <td></td> <td></td>		U		
Methylene Chloride U 5.0 2-Metryinaphrihalene U 5.0 Maphthalene U 5.0 Naphthalene U 5.0 Naphthalene U 1.0 Styrene U 1.0 1,1,2-Tetrachloroethane U 1.0 1,1,2-Tetrachloroethane U 1.0 Totluene U 1.0 1,2,2-Trichloroethane U 1.0 1,4,1-Trichloroethane U 1.0 1,4,1-Trichloroethane U 1.0 1,1,1-Trichloroethane U 1.0 1,1,1-Trichloroethane U 1.0 1,1,1-Trichloroethane U 1.0 1,1,1-Trichloroethane U 1.0 1,2-Trichloropothane U 1.0 1,2-Trichloropothane U 1.0 1,2-S-Trichloropothane U 1.0 1,2-S-Trichloropothane U 1.0 1,2-S-Trimethylbenzene U 1.0 Viny Chioride		U		5.0
2-Methylnaphthalene U 5.0 MTBE U 5.0 Naphthalene U 5.0 n-Propylbenzene U 1.0 Syrene U 1.0 1.1,2-Tertachlorethane U 1.0 1.1,2-Tertachlorethane U 1.0 Toluene U 1.0 Toluene U 5.0 1,1,2-Trichlorothane U 1.0 1,2,2-Trichlorothane U 1.0 1,2,2-Trichlorothane U 1.0 1,2,2-Trichlorothane U 1.0 1,2,2-Trichlorothane U 1.0 1,2,3-Trinchlorothane U 1.0 1,2,3-Trimethylberzene U 1.0 Viny Chiorido U 1.0 Viny Chiorido U 2.0 <td></td> <td>U</td> <td></td> <td>50</td>		U		50
MTBE U 5.0 Naphthalen U 5.0 Propylance U 1.0 Styren U 1.0 I.1.1,2-Tetrachloroethane U 1.0 Tetrachloroethane U 1.0 Toluen U 1.0 1.4,2-Trichloroethane U 1.0 1.1,1-Trichloroethane U 1.0 1.1,2-Trichloroethane U 1.0 1.1,2-Trichloroethane U 1.0 1.2,3-Trinhoroptane U 1.0 1.2,3-Trinhoroptane U 1.0 1.2,3-Trinhoroptane U 1.0 1.2,4-Trinhorbybezne U 1.0 1.2,4-Trinhorbybezne U 1.0 1.3,5-Trimethybezne U 1.0 Viny Choide U 1.0 Viny Choide U 1.0 Nappage U 1.0 Viny Choide U 2.0 Pylene U 2.0 Obmon		U		5.0
Naphthalene U 5.0 n-Propybenzene U 1.0 Styrene U 1.0 1,1,2-Tetrachloroethane U 1.0 1,2-Zettrachloroethane U 1.0 Tollene U 1.0 1,2-A-Trichloroethane U 1.0 1,2-A-Trichloroethane U 5.0 1,1,1-Trichloroethane U 1.0 Trichloroethane U 1.0 Trichloroethane U 1.0 Trichloropopane U 1.0 1,2-Trichloropopane U 1.0 1,2-Frimethybenzene U 1.0 1,3-Frimethybenzene U 1.0 1,3-Frimethybenzene U 1.0 Will Choirde U 1.0 msp-Xylene U 2.0 e-Xylene U 2.0 Obbromiluoromethane(S) 91 80-120 Dibromiluoromethane(4) 91 80-120 1,2-Dichloroethane-4(S) 153		U		
n-Propylbenzene U 1.0 Syrene U 1.0 1.1,1,2-Tetrachloroethane U 1.0 1.1,2-Tetrachloroethane U 1.0 Toluene U 1.0 1.2,4-Trichloroethane U 1.0 1.2,4-Trichloroethane U 1.0 1.4,1-Trichloroethane U 1.0 1.1,1-Trichloroethane U 1.0 1.1,1-Trichloroethane U 1.0 1.1,1-Trichloroethane U 1.0 1.1,2-Trichloroethane U 1.0 1.1,2-Trichloroethane U 1.0 1.2,2-Trichloroethane U 1.0 1.2,3-Trichloroethane U 1.0 1.2,3-Trichloroethane U 1.0 1.2,3-Trichloroethane U 1.0 1.2,3-Trichloropropane U 1.0 1.2,3-Trichloropropane U 1.0 1.2,3-Trimethylbenzene U 1.0 1.2,3-Trimethylbenzene U 1.0 1.2,3-Trimethylbenzene U 1.0 1.2,4-Trimethylbenzene U 1.0 1.2,4-Trimethylbenzene U 1.0 1.2,5-Trimethylbenzene U 1.0 1.0 1.2,5-Trimethylbenzene U 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0		U		5.0
Styrene U 1.0 1.1,1.2-Tetrachloroethane U 1.0 Tetrachloroethane U 1.0 Tetrachloroethane U 1.0 Toluene U 5.0 1,2.4-Trichloroethane U 1.0 1,1.1-Trichloroethane U 1.0 1,1.2-Trichloroethane U 1.0 Trichloroethane U 1.0 Trichloroethane U 1.0 1,2.3-Trinchloropane U 1.0 1,2.3-Trinchloropane U 1.0 1,2.4-Trinnethybenzene U 1.0 1,2.4-Trinnethybenzene U 1.0 1,3.5-Trinnethybenzene U 1.0 1,3.5-Trinnethybenzene U 1.0 1,3.5-Trinnethybenzene U 1.0 Niyor Chloride U 1.0 map-Xylene U 2.0 e-Xylene U 1.0 -4-Bronofluoroberzene(S) 91 80-120 Dibronofluoroethane-d4(S)		U		
1,1,2-Tetrachioroethane U 1,0 1,2,2-Tetrachioroethane U 1,0 Tetrachioroethane U 1,0 Toluene U 5,0 1,1,1-Trichioroethane U 1,0 1,1,2-Trichioroethane U 1,0 1,1,2-Trichioroethane U 1,0 Trichioroethane U 1,0 Trichioroethane U 1,0 1,2,3-Trichioropropane U 1,0 1,2,3-Trimethylbenzene U 1,0 1,2,4-Trimethylbenzene U 1,0 1,2,5-Trimethylbenzene U 1,0 Viny Chloride U 1,0 wisp Cylene U 1,0 4-Bromofluoromethane(S) 91 80-120 Dibromofluoromethane(S) 91 80-120 1,2-Dichloroethane-d4(S) 113 80-120				
1,1,2,2-Tetrachloroethane U 1,0 Tetrachloroethane U 1,0 Toluene U 1,0 1,2,4-Trichlorobenzene U 5,0 1,1,1-Trichloroethane U 1,0 1,1,2-Trichloroethane U 1,0 Trichlorofluoromethane U 1,0 1,2,3-Trichloroppane U 1,0 1,2,3-Trimethylbenzene U 1,0 1,3,5-Trimethylbenzene U 1,0 1,3,5-Trimethylbenzene U 1,0 Vinyl Chloride U 1,0 map-ykine U 2,0 o-Xylene U 1,0 4-Bromofluorobenzene(S) 91 80-120 Dibromofluoromethane(S) 91 80-120 1,2-Dichloroethane-d4(S) 113 80-120				
Tetrachloroethene U 1.0 Toluene U 5.0 1,2,4 Trichloroethane U 1.0 1,1,1-Trichloroethane U 1.0 1,1,2-Trichloroethane U 1.0 Trichloroethane U 1.0 1,2,3-Trichloropropane U 1.0 1,2,3-Trimethylbenzene U 1.0 1,3,5-Trimethylbenzene U 1.0 1,3,5-Trimethylbenzene U 1.0 Vinyl Chloride U 1.0 vylene U 2.0 o-Xylene U 2.0 o-Xylene U 1.0 4-Bromofluorobenzene(S) 91 80-120 Dibromofluoromethane(S) 91 80-120 1,2-Dichloroethane-d4(S) 113 80-120	1,1,1,2-Tetrachloroethane	U		1.0
Tolluene U 1.0 1,2,4-Trichlorobenzene U 5.0 1,1-Trichloroethane U 1.0 1,1-Trichloroethane U 1.0 Trichlorofluoromethane U 1.0 1,2,3-Trichloropropane U 1.0 1,2,3-Trimethylbenzene U 1.0 1,2,4-Trimethylbenzene U 1.0 1,3,5-Trimethylbenzene U 1.0 Vinyl Chloride U 1.0 Vinyl Chloride U 1.0 «P-Xylene U 2.0 «Ylene U 1.0 4-Bromofluorobenzene(S) 91 80-120 Dibromofluoromethane(S) 91 80-120 1,2-Dichloroethane-d4(S) 113 80-120				
1,2,4-Trichlorobenzene U 5.0 1,1,1-Trichloroethane U 1.0 1,1,2-Trichloroethane U 1.0 Trichloroftuoromethane U 1.0 1,2,3-Trichloropropane U 1.0 1,2,3-Trimethylbenzene U 1.0 1,2,4-Trimethylbenzene U 1.0 1,3,5-Trimethylbenzene U 1.0 Vinyl Chloride U 1.0 m&p-Xylene U 1.0 •Xylene U 1.0 4-Bromofluorobenzene(S) 91 80-120 Dibromofluoromethane(S) 91 80-120 1,2-Dichloroethane-d4(S) 113 80-120		U		1.0
1,1,1-Trichloroethane U 1.0 1,1,2-Trichloroethane U 1.0 Trichlorofthane U 1.0 Trichloropthane U 1.0 1,2,3-Trichloropropane U 1.0 1,2,3-Trimethylbenzene U 1.0 1,2,4-Trimethylbenzene U 1.0 1,3,5-Trimethylbenzene U 1.0 1,3,5-Trimethylbenzene U 1.0 msp-Xylene U 2.0 o-Xylene U 1.0 4-Bromofluorobenzene(S) 91 80-120 Dibromofluoromethane(S) 91 80-120 1,2-Dichloroethane-d4(S) 113 80-120		U		
1,1,2-Trichloroethane U 1.0 Trichloroftuoromethane U 1.0 1,2,3-Trichloropropane U 1.0 1,2,3-Trimethylbenzene U 1.0 1,2,4-Trimethylbenzene U 1.0 1,3,5-Trimethylbenzene U 1.0 Vinyl Chloride U 1.0 wasp-Xylene U 2.0 o-Xylene U 1.0 4-Bromofluorobenzene(S) 91 80-120 Dibromofluoromethane-d4(S) 113 80-120		U		
Trichloroethene U 1.0 Trichlorofluoromethane U 1.0 1,2,3-Trichloropropane U 1.0 1,2,3-Trimethylbenzene U 1.0 1,2,4-Trimethylbenzene U 1.0 1,3,5-Trimethylbenzene U 1.0 Vinyl Chloride U 1.0 w8p-Xylene U 2.0 o-Xylene U 1.0 4-Bromofluorobenzene(S) 91 80-120 Dibromofluoromethane(S) 91 80-120 1,2-Dichloroethane-d4(S) 113 80-120				
Trichlorofluoromethane U 1.0 1,2,3-Trichloropropane U 1.0 1,2,3-Trimethylbenzene U 1.0 1,2,4-Trimethylbenzene U 1.0 1,3,5-Trimethylbenzene U 1.0 Vinyl Chloride U 1.0 m&p-Xylene U 2.0 o-Xylene U 1.0 4-Bromofluorobenzene(S) 91 80-120 Dibromofluoromethane(S) 91 80-120 1,2-Dichloroethane-d4(S) 113 80-120		U		
1,2,3-Trichloropropane U 1.0 1,2,3-Trimethylbenzene U 1.0 1,2,4-Trimethylbenzene U 1.0 1,3,5-Trimethylbenzene U 1.0 Vinyl Chloride U 1.0 m&p-Xylene U 2.0 o-Xylene U 1.0 4-Bromofluorobenzene(S) 91 80-120 Dibromofluoromethane(S) 91 80-120 1,2-Dichloroethane-d4(S) 113 80-120	Trichloroethene	U		
1,2,3-Trimethylbenzene U 1.0 1,2,4-Trimethylbenzene U 1.0 1,3,5-Trimethylbenzene U 1.0 Vinyl Chloride U 1.0 m&p-Xylene U 2.0 o-Xylene U 1.0 4-Bromofluorobenzene(S) 91 80-120 Dibromofluoromethane(S) 91 80-120 1,2-Dichloroethane-d4(S) 113 80-120		U		1.0
1,2,4-Trimethylbenzene U 1.0 1,3,5-Trimethylbenzene U 1.0 Vinyl Chloride U 1.0 m&p-Xylene U 2.0 o-Xylene U 1.0 4-Bromofluorobenzene(S) 91 80-120 Dibromofluoromethane(S) 91 80-120 1,2-Dichloroethane-d4(S) 113 80-120		U		
1,3,5-Trimethylbenzene U 1.0 Vinyl Chloride U 1.0 m&p-Xylene U 2.0 o-Xylene U 1.0 4-Bromofluorobenzene(S) 91 80-120 Dibromofluoromethane(S) 91 80-120 1,2-Dichloroethane-d4(S) 113 80-120	1,2,3-Trimethylbenzene	U		1.0
Vinyl Chloride U 1.0 m&p-Xylene U 2.0 o-Xylene U 1.0 4-Bromofluorobenzene(S) 91 80-120 Dibromofluoromethane(S) 91 80-120 1,2-Dichloroethane-d4(S) 113 80-120		U		1.0
m&p-Xylene U 2.0 o-Xylene U 1.0 4-Bromofluorobenzene(S) 91 80-120 Dibromofluoromethane(S) 91 80-120 1,2-Dichloroethane-d4(S) 113 80-120		U		1.0
o-Xylene U 1.0 4-Bromofluorobenzene(S) 91 80-120 Dibromofluoromethane(S) 91 80-120 1,2-Dichloroethane-d4(S) 113 80-120		U		1.0
4-Bromofluorobenzene(S) 91 80-120 Dibromofluoromethane(S) 91 80-120 1,2-Dichloroethane-d4(S) 113 80-120	m&p-Xylene	U		
Dibromofluoromethane(S) 91 80-120 1,2-Dichloroethane-d4(S) 113 80-120		U		1.0
1,2-Dichloroethane-d4(S) 113 80-120		91		80-120
		91		80-120
	1,2-Dichloroethane-d4(S)	113		80-120
Toluene-d8(S) 94 80-120	Toluene-d8(S)	94		80-120

1914 Holloway Drive 11766 E Gand Rver 8660 S Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order ID: A09642 Page: 7 of 9 Date: 07/14/22

VM22G13A: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VM22G13A.LCS: 07/13/2022 09:37	7 [VM22G13A] VM2	2G13A.LCSD: 07/1	3/2022 10:05 [\	/M22G13A]								
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Am	ount			Qualifier	Spike Amo	unt Result	Rec.	Qualifier			Qualifier
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
Acetone	50.0	25.8	52	54-140	*	50.0	25.6	51	*	2	20	
Acrylonitrile	50.0	48.0	96	70-130		50.0	48.5	97		1	20	
Benzene	50.0	46.4	93	80-120		50.0	47.6	95		2	20	
Bromobenzene	50.0	49.5	99	75-125		50.0	48.6	97		2	20	
Bromochloromethane	50.0	48.8	98	70-130		50.0	48.9	98		0	20	
Bromodichloromethane	50.0	45.0	90	75-120		50.0	45.6	91		1	20	
Bromoform	50.0	50.1	100	70-130		50.0	51.4	103		3	20	
Bromomethane	50.0	53.1	106	68-135		50.0	55.7	111		5	20	
2-Butanone	50.0	37.5	75	70-148		50.0	38.4	77		3	20	
n-Butylbenzene	50.0	55.0	110	70-133		50.0	55.1	110		0	20	
sec-Butylbenzene	50.0	53.5	107	70-125		50.0	53.6	107		0	20	
tert-Butylbenzene	50.0	52.8	106	70-130		50.0	53.1	106		0	20	
Carbon Disulfide	50.0	44.6	89	70-130		50.0	45.2	90		1	20	
Carbon Tetrachloride	50.0	45.1	90	70-130		50.0	45.9	92		2	20	
Chlorobenzene	50.0	50.8	102	80-120		50.0	51.5	103		1	20	
Chloroethane	50.0	58.5	117	61-130		50.0	59.2	118		1	20	
Chloroform	50.0	47.6	95	80-120		50.0	48.2	96		1	20	
Chloromethane	50.0	49.2	98	67-125		50.0	52.3	105		7	20	
2-Chlorotoluene	50.0	49.5	99	75-125		50.0	49.5	99		0	20	
1,2-Dibromo-3-chloropropane (SIM)	50.0	49.5	99	70-130		50.0	49.7	99		0	20	
Dibromochloromethane	50.0	45.4	91	70-130		50.0	46.5	93		2	20	
Dibromomethane	50.0	45.8	92	75-125		50.0	45.7	91		1	20	
1,2-Dichlorobenzene	50.0	51.2	102	70-120		50.0	51.1	102		0	20	
1,3-Dichlorobenzene	50.0	51.7	103	75-125		50.0	51.7	103		0	20	
1,4-Dichlorobenzene	50.0	51.8	104	75-125		50.0	51.5	103		1	20	
Dichlorodifluoromethane	50.0	53.2	106	70-136		50.0	55.4	111		5	20	
1,1-Dichloroethane	50.0	48.0	96	70-130		50.0	48.6	97		1	20	
1,2-Dichloroethane	50.0	50.0	100	70-130		50.0	49.9	100		0	20	
1,1-Dichloroethene	50.0	50.9	102	78-120		50.0	51.9	104		2	20	
cis-1,2-Dichloroethene	50.0	49.0	98	70-125		50.0	50.1	100		2	20	
trans-1,2-Dichloroethene	50.0	51.8	104	70-130		50.0	52.6	105		1	20	
1,2-Dichloropropane	50.0	47.8	96	80-121		50.0	48.7	97		1	20	
cis-1,3-Dichloropropene	50.0	42.7	85	70-130		50.0	43.6	87		2	20	

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Order ID: A09642
Page: 8 of 9
Date: 07/14/22

VM22G13A: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VM22G13A.LCS: 07/13/2022 09		2G13A.LCSD: 07/1	-	VM22G13AJ								
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Amo	ount			Qualifier	Spike Amour	nt Result	Rec.	Qualifier			Qualifie
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
rans-1,3-Dichloropropene	50.0	47.0	94	70-132		50.0	47.9	96		2	20	
Ethylbenzene	50.0	51.7	103	80-120		50.0	52.7	105		2	20	
thylene Dibromide	50.0	47.3	95	80-120		50.0	48.2	96		1	20	
-Hexanone	50.0	48.4	97	70-130		50.0	49.4	99		2	20	
sopropylbenzene	50.0	51.8	104	75-125		50.0	53.1	106		2	20	
-Methyl-2-pentanone	50.0	53.6	107	70-130		50.0	53.9	108		1	20	
lethylene Chloride	50.0	46.6	93	70-130		50.0	47.3	95		2	20	
2-Methylnaphthalene	50.0	48.0	96	70-130		50.0	46.6	93		3	20	
<i>I</i> TBE	50.0	48.4	97	70-125		50.0	49.9	100		3	20	
laphthalene	50.0	46.0	92	70-130		50.0	44.3	89		3	20	
-Propylbenzene	50.0	52.2	104	70-130		50.0	52.2	104		0	20	
tyrene	50.0	44.1	88	70-130		50.0	44.5	89		1	20	
,1,1,2-Tetrachloroethane	50.0	49.0	98	80-130		50.0	51.0	102		4	20	
,1,2,2-Tetrachloroethane	50.0	52.6	105	70-130		50.0	52.8	106		1	20	
etrachloroethene	50.0	52.4	105	70-130		50.0	53.0	106		1	20	
oluene	50.0	48.3	97	80-120		50.0	48.6	97		0	20	
,2,4-Trichlorobenzene	50.0	50.8	102	70-130		50.0	49.4	99		3	20	
,1,1-Trichloroethane	50.0	44.7	89	70-130		50.0	46.4	93		4	20	
,1,2-Trichloroethane	50.0	48.4	97	75-125		50.0	49.6	99		2	20	
richloroethene	50.0	44.3	89	71-125		50.0	45.9	92		3	20	
richlorofluoromethane	50.0	59.1	118	70-133		50.0	60.0	120		2	20	
,2,3-Trichloropropane	50.0	54.0	108	75-125		50.0	52.0	104		4	20	
,2,3-Trimethylbenzene	50.0	51.2	102	70-130		50.0	50.8	102		0	20	
,2,4-Trimethylbenzene	50.0	52.9	106	75-130		50.0	52.6	105		1	20	
,3,5-Trimethylbenzene	50.0	52.7	105	75-130		50.0	52.9	106		1	20	
inyl Chloride	50.0	49.1	98	74-125		50.0	51.6	103		5	20	
n&p-Xylene	100	100	100	75-130		100	102	102		2	20	
-Xylene	50.0	49.8	100	80-120		50.0	50.5	101		1	20	
4-Bromofluorobenzene(S)			98	80-120				99				
Dibromofluoromethane(S)			94	80-120				94				
1,2-Dichloroethane-d4(S)			107	80-120				108				
Toluene-d8(S)			98	80-120				97				

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Order ID: A09642 Page: 9 of 9 Date: 07/14/22

Definitions/ Qualifiers:

- U: The analyte was not detected at or above the Reporting Limit (RL).
- *: Value reported is outside QC limits

Exception Summary:

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

Report Generated By:

By Bailey Welch at 3:12 PM, Jul 14, 2022

Bailey Welch

RSN: VM22G13A-221950714145859

Fibertec environmental services

Analytical Laboratory

1914 Holloway Drive Holf, MI 48842

Phone: 517 699 0345 Fax: 517 699 0388 email: lab@fibertec.us 8660 S. Mackinaw Trail Cadillac, MI 49601 Phone: 231 775 8368

Fax: 231 775 8584

Geoprobe

11766 E. Grand River Rd. Brighton, MI 48116 Phone: 810 220 3300

Fax: 810 220 3311

Chain of Custody #

205973 PAGE 1 of 1

Client Name: Arcadis						PARAMET	ERS			Matrix Code Deliverables
Contact Person: Stacey Hannula Project Name/ Number: 30136112 TRW Milford	DE)								9	S Soil Gw Ground Water X Level 2 A Air sw Surface Water Level 3
Email distribution list: Stacey. hannula@arcadus.com john.mcinnis@arcadus.com	MATRIX (SEE RIGHT CORNER FOR CODE)	# OF CONTAINERS	8260 B						Ē	O Oil ww Waste Water Level 4 P Wipe X Other: Specify EDD
Quote#	X (SEE R	NON	J							
Purchase Order# 30136112 Date Time Sample # Client Sample Descriptor	MATRI	# OF C	2							Remarks:
7-1122 0943 OW-16D2-071122	6W		3							48hr TAT
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7-11-22 1042 OW-1602R1_071122	614	3	3							48/N TAT
7-11-22 1010 FIELD BLANK-071122	QM	3	3							Std TAT
7-11-28 Trop Blank		1	1						I	TAT SE
·										Received By Lah
										JUL 1 1 2022
			Ц							Initials: BP
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Relinquished By: Relinquished By:	Date			0 1	4:45	1/	. 1	000		Poures 2 12:40
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1 bus. day3 bus. days3 bus. days		_4 b	us. d	ays				Fiberted	pro	eject number: A09642
5-7 bus. days (standard) Other (specify time/date requirement):			_					Temper	ature	e upon receipt at Lab: 5.1°C
Please	see	ba	ick	for ter	ms an	d conc	litions			

Fibertec environmental services

Analytical Laboratory

1914 Holloway Drive

Holf, MI 48842

Phone: 517 699 0345 Fax: 517 699 0388 email: lab@fibertec.us 8660 S. Mackinaw Trail Cadillac, MI 49601

Phone: 231 775 8368

Fax: 231 775 8584

Geoprobe

11766 E. Grand River Rd. Brighton, MI 48116

Phone: 810 220 3300 Fax: 810 220 3311 Chain of Custody # 205973
PAGE ____ of ___

Client Name: Avcadus						PARAMETER	RS		Matrix Code Deliverables	
Contact Pe	rson: St	acy H	annula							S Soil Gw Ground Water X Level 2
Project Nar	ne/Number:	-	TRW Milford	CODE)		B			37.	A Air SW Surface Water Level 3 O Oil ww Waste Water Level 4
Email distrib	oution list: Si	tacey.h	cinnis@arcadis.com	MATRIX (SEE RIGHT CORNER FOR CODE)	# OF CONTAINERS	8260			HOLD SAMPLE	P Wipe X Other: Specify EDD
Quote#				SEE RIGH	NTA				I	
Purchase C	rder# 3	01361		TRIX	A S	VDC				
Date	Time	Sample #	Client Sample Descriptor	¥	_					Remarks:
7-11-22	0943		OW-16D2-071122	6W	3	3				48hr TAT
			OW D	+-						
7-11-22	1042		OW-16D2R1_071122	6W	3	3				48hr TAT
7-11-22	1010		FIELD BLANK-071122	RN	3	3				Std TAT
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5-7 k	ous. days (sta	ndard)	Other (specify time/date requirement):					Temper	ature	e upon receipt at Lab: 5.1°C
			Pleas	e see	e bo	ack	for terms and condi	tions		



Wednesday, August 10, 2022

Fibertec Project Number:

A10163

Project Identification:

TRW Milford (30136112) /30136112

Submittal Date:

08/08/2022

Ms. Stacey Hannula Arcadis U.S., Inc. - Novi 28550 Cabot Drive Suite 500 Novi, MI 48377

Dear Ms. Hannula,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

By Jacob Sutherlund at 1:59 PM, Aug 10, 2022

of Athelas

For Daryl P. Strandbergh Laboratory Director

Enclosures



Order: Date:

A10163 08/10/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2_080822 Chain of Custody: 206299

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 08/08/22

Client Project No: 30136112 Sample Matrix: Ground Water Collect Time: 09:10

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS

Aliquot ID: A10163-001 Matrix: Ground Water

Method: EPA 5030C/EPA 8260D

Description: OW-16D2_080822

						Prepara	ation	Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U		μg/L	50	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
3. Benzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
4. Bromobenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
5. Bromochloromethane	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
6. Bromodichloromethane	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
7. Bromoform	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
8. Bromomethane	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
9.2-Butanone	U		μg/L	25	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
10. n-Butylbenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
11. sec-Butylbenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
12. tert-Butylbenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
13. Carbon Disulfide	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
14. Carbon Tetrachloride	U	V+	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
15. Chlorobenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
16. Chloroethane	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
17. Chloroform	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
18. Chloromethane	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
19.2-Chlorotoluene	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
21. Dibromochloromethane	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
22. Dibromomethane	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
23.1,2-Dichlorobenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
27.1,1-Dichloroethane	3.6		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
29.1,1-Dichloroethene	U	L-	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
30. cis-1,2-Dichloroethene	16		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
35. Ethylbenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
36. Ethylene Dibromide	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
37.2-Hexanone	U		μg/L	50	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC

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Order: A10163 Date: 08/10/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2_080822 Chain of Custody: 206299

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 08/08/22

Client Project No: 30136112 Sample Matrix: Ground Water Collect Time: 09:10

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS

Aliquot ID: A10163-001 Matrix: Ground Water

Method: EPA 5030C/EPA 8260D

Description: OW-16D2_080822

					Prepar	ation	Analysis		
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
38. Isopropylbenzene	U	μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
39.4-Methyl-2-pentanone	U	μg/L	50	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
40. Methylene Chloride	U	μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
‡ 41.2-Methylnaphthalene	U	μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
42. MTBE	U	μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
43. Naphthalene	U	μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
44. n-Propylbenzene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
45. Styrene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
46.1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
47.1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
48. Tetrachloroethene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
49. Toluene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
50. 1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
‡ 52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
53. Trichloroethene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
55. 1,2,3-Trichloropropane	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
‡ 56.1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
57.1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
58.1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
59. Vinyl Chloride	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
60. m&p-Xylene	U	μg/L	2.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
61. o-Xylene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
‡ 62. Xylenes	U	μg/L	3.0	1.0	08/09/22	VB22H09A	08/09/22 17:16	VB22H09A	SNC
Surrogate Summary			Control Limits	Instrument	<u>Batch</u>	Run T	ime Colum	ın Inst. Me	ethod
4-Bromofluorobenzene(S)	101	%	80-120	VB	VB22H09A	8/9/2022		VBW	
Dibromofluoromethane(S)	96	%	80-120	VB	VB22H09A	8/9/2022		VBW	
1,2-Dichloroethane-d4(S) Toluene-d8(S)	101 101	% %	80-120 80-120	VB VB	VB22H09A VB22H09A	8/9/2022 8/9/2022		VBW VBW	

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Order: A10163 Date: 08/10/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2R1_080822 Chain of Custody: 206299

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 08/08/22

Description: OW-16D2R1_080822

Client Project No: 30136112 Sample Matrix: Ground Water Collect Time: 09:59

Sample Comments:

Method: EPA 5030C/EPA 8260D

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Aliquot ID: A10163-002 Matrix: Ground Water

					Prepara	ation	Ana			
Parameter(s)	Result	Q Un	its F	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U	μg	/L	50	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
‡ 2. Acrylonitrile	U	μg	/L	2.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
3. Benzene	U	μg	/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
4. Bromobenzene	U	μg	/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
5. Bromochloromethane	U	μg	/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
6. Bromodichloromethane	U	μg	/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
7. Bromoform	U	μg	/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
8. Bromomethane	U	μg	/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
9.2-Butanone	U	μg	/L	25	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
10. n-Butylbenzene	U	μg	/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
11. sec-Butylbenzene	U	μg	/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
12. tert-Butylbenzene	U	μg	/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
13. Carbon Disulfide	U	μg	/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
14. Carbon Tetrachloride	U	V+ µg	/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
15. Chlorobenzene	U	μg	/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
16. Chloroethane	U	μg	/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
17. Chloroform	U	μg	/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
18. Chloromethane	U	μg	/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
19.2-Chlorotoluene	U	μg	/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U	μg	/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
21. Dibromochloromethane	U	μg	/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
22. Dibromomethane	U	μg	/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
23.1,2-Dichlorobenzene	U	μg	/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
24.1,3-Dichlorobenzene	U	μg	/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
25. 1,4-Dichlorobenzene	U	μg	/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
26. Dichlorodifluoromethane	U	μg	/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
27.1,1-Dichloroethane	2.2	μg	/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
28.1,2-Dichloroethane	U	μg	/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
29.1,1-Dichloroethene	U	L- µg	/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
30. cis-1,2-Dichloroethene	20	μg	/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
31. trans-1,2-Dichloroethene	1.3	μg	/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
32.1,2-Dichloropropane	U	μg	/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
33. cis-1,3-Dichloropropene	U	μд	/L	0.50	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
34. trans-1,3-Dichloropropene	U	μg	/L	0.50	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
35. Ethylbenzene	U	μд	/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
36. Ethylene Dibromide	U	μg	/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
37.2-Hexanone	U	μд	/L	50	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC

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Order: A10163 Date: 08/10/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2R1_080822 Chain of Custody: 206299

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 08/08/22

Client Project No: 30136112 Sample Matrix: Ground Water Collect Time: 09:59

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS

Aliquot ID: A10163-002 Matrix: Ground Water

Method: EPA 5030C/EPA 8260D

Description: OW-16D2R1_080822

		·			Prepar	ation	Analysis		
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
38. Isopropylbenzene	U	μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
39.4-Methyl-2-pentanone	U	μg/L	50	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
40. Methylene Chloride	U	μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
‡ 41.2-Methylnaphthalene	U	μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
42.MTBE	U	μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
43. Naphthalene	U	μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
44. n-Propylbenzene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
45. Styrene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
46. 1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
47.1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
48. Tetrachloroethene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
49. Toluene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
50.1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
‡ 52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
53. Trichloroethene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
55. 1,2,3-Trichloropropane	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
‡ 56.1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
57.1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
58.1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
59. Vinyl Chloride	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
60. m&p-Xylene	U	μg/L	2.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
61. o-Xylene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
‡ 62. Xylenes	U	μg/L	3.0	1.0	08/09/22	VB22H09A	08/09/22 17:41	VB22H09A	SNC
Surrogate Summary			Control Limits	Instrument	<u>Batch</u>	Run T	<u>ime</u> <u>Colum</u>	nn Inst. Me	<u>ethod</u>
4-Bromofluorobenzene(S)	100	%	80-120	VB	VB22H09A	8/9/2022		VBW	
Dibromofluoromethane(S)	95	%	80-120	VB	VB22H09A	8/9/2022		VBW	
1,2-Dichloroethane-d4(S) Toluene-d8(S)	100 98	% %	80-120 80-120	VB VB	VB22H09A VB22H09A	8/9/2022 8/9/2022		VBW VBW	

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Order: A10163 Date: 08/10/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2R2_080822 Chain of Custody: 206299

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 08/08/22

Description: OW-16D2R2_080822

Client Project No: 30136112 Sample Matrix: Ground Water Collect Time: 11:25

Sample Comments:

Method: EPA 5030C/EPA 8260D

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Aliquot ID: A10163-003 Matrix: Ground Water

						Prepar	ation	Ana	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U		μg/L	50	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
3. Benzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
4. Bromobenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
5. Bromochloromethane	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
6. Bromodichloromethane	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
7. Bromoform	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
8. Bromomethane	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
9.2-Butanone	U		μg/L	25	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
10. n-Butylbenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
11. sec-Butylbenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
12. tert-Butylbenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
13. Carbon Disulfide	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
14. Carbon Tetrachloride	U	V+	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
15. Chlorobenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
16. Chloroethane	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
17. Chloroform	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
18. Chloromethane	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
19.2-Chlorotoluene	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
21. Dibromochloromethane	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
22. Dibromomethane	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
23.1,2-Dichlorobenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
24.1,3-Dichlorobenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
25.1,4-Dichlorobenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
29.1,1-Dichloroethene	U	L-	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
30. cis-1,2-Dichloroethene	11		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
35. Ethylbenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
36. Ethylene Dibromide	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
37.2-Hexanone	U		μg/L	50	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC

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Order: A1
Date: 08

A10163 08/10/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2R2_080822 Chain of Custody: 206299

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 08/08/22

Client Project No: 30136112 Sample Matrix: Ground Water Collect Time: 11:25

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS

Aliquot ID: A10163-003 Matrix: Ground Water

Method: EPA 5030C/EPA 8260D

Description: OW-16D2R2_080822

						Prepar	ation	ıΑ	nalysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
38. Isopropylbenzene	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
39.4-Methyl-2-pentanone	U		μg/L	50	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
40. Methylene Chloride	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
‡ 41.2-Methylnaphthalene	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
42.MTBE	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
43. Naphthalene	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
44. n-Propylbenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
45. Styrene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
46.1,1,1,2-Tetrachloroethane	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
47.1,1,2,2-Tetrachloroethane	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
48. Tetrachloroethene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
49. Toluene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
50.1,2,4-Trichlorobenzene	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	N SNC
51.1,1,1-Trichloroethane	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
52.1,1,2-Trichloroethane	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
53. Trichloroethene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
54. Trichlorofluoromethane	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	N SNC
55. 1,2,3-Trichloropropane	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
56.1,2,3-Trimethylbenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
57.1,2,4-Trimethylbenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
58.1,3,5-Trimethylbenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
59. Vinyl Chloride	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
60. m&p-Xylene	U		μg/L	2.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
61. o-Xylene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
‡ 62. Xylenes	U		μg/L	3.0	1.0	08/09/22	VB22H09A	08/09/22 18:05	VB22H09A	SNC
Surrogate Summary				Control Limits	Instrument	<u>Batch</u>	Run T	<u>ime</u> <u>Colur</u>	nn Inst. M	ethod
4-Bromofluorobenzene(S)	100		%	80-120	VB	VB22H09A	8/9/2022		VBW	
Dibromofluoromethane(S)	95		%	80-120	VB	VB22H09A	8/9/2022		VBW	
1,2-Dichloroethane-d4(S) Toluene-d8(S)	99 99		% %	80-120 80-120	VB VB	VB22H09A VB22H09A	8/9/2022 8/9/2022		VBW VBW	

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Order: Date:

08/08/22

Collect Date:

A10163 08/10/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Field Blank_080822 Chain of Custody: 206299

Client Project No: 30136112 Sample Matrix: Blank: Field Collect Time: 11:10

Description: Field Blank_080822

Sample Comments:

Client Project Name:

TRW Milford (30136112)

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Sample No:

Volatile Organic Compounds (VOCs) by GC/MS A10163-004 Matrix: Blank: Field Aliquot ID: Method: EPA 0624.1/EPA 8260D

						Prepara	ation	Ana	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U		μg/L	50	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
3. Benzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
4. Bromobenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
5. Bromochloromethane	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
6. Bromodichloromethane	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
7. Bromoform	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
8. Bromomethane	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
9.2-Butanone	U		μg/L	25	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
10. n-Butylbenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
11. sec-Butylbenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
12. tert-Butylbenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
13. Carbon Disulfide	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
14. Carbon Tetrachloride	U	V+	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
15. Chlorobenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
16. Chloroethane	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
17. Chloroform	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
18. Chloromethane	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
19.2-Chlorotoluene	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
21. Dibromochloromethane	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
22. Dibromomethane	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
23.1,2-Dichlorobenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
29.1,1-Dichloroethene	U	L-	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
35. Ethylbenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
36. Ethylene Dibromide	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
37.2-Hexanone	U		μg/L	50	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC

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Order: A
Date: 0

A10163 08/10/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Field Blank_080822 Chain of Custody: 206299

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 08/08/22

Client Project No: 30136112 Sample Matrix: Blank: Field Collect Time: 11:10

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS

Aliquot ID: A10163-004 Matrix: Blank: Field

Method: EPA 0624.1/EPA 8260D

Description: Field Blank_080822

					Prepar	ation	An	alysis	
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
38. Isopropylbenzene	U	μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
39.4-Methyl-2-pentanone	U	μg/L	50	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
40. Methylene Chloride	U	μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
‡ 41.2-Methylnaphthalene	U	μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
42. MTBE	U	μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
43. Naphthalene	U	μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
44. n-Propylbenzene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
45. Styrene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
46. 1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
47.1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
48. Tetrachloroethene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
49. Toluene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
50. 1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
‡ 52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
53. Trichloroethene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
55. 1,2,3-Trichloropropane	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
‡ 56.1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
57. 1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
58. 1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
59. Vinyl Chloride	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
60. m&p-Xylene	U	μg/L	2.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
61. o-Xylene	U	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
‡ 62. Xylenes	U	μg/L	3.0	1.0	08/09/22	VB22H09A	08/09/22 12:43	VB22H09A	SNC
Surrogate Summary			Control Limits	Instrument	<u>Batch</u>	Run T	<u>ime</u> <u>Colum</u>	nn Inst. Me	ethod
4-Bromofluorobenzene(S)	98	%	80-120	VB	VB22H09A	8/9/2022		VBW	
Dibromofluoromethane(S)	95	%	80-120 80-120	VB VB	VB22H09A	8/9/2022		VBW.	
1,2-Dichloroethane-d4(S) Toluene-d8(S)	102 100	% %	80-120 80-120	VB VB	VB22H09A VB22H09A	8/9/2022 8/9/2022		VBW.	

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Order: A10163 Date: 08/10/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Trip Blank Chain of Custody: 206299

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 08/08/22

Client Project No: 30136112 Sample Matrix: Blank: Trip Collect Time: NA

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS

Aliquot ID: A10163-005 Matrix: Blank: Trip

Method: EPA 5030C/EPA 8260D

Description: Trip Blank

						Prepai			alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	In
1. Acetone	U		μg/L	50	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	. SN
2. Acrylonitrile	U		μg/L	2.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	18 i
3. Benzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	SN
4. Bromobenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	. SI
5. Bromochloromethane	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	SI
6. Bromodichloromethane	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	. SI
7. Bromoform	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	S
8. Bromomethane	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	S
9.2-Butanone	U		μg/L	25	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	S
10. n-Butylbenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	S
11. sec-Butylbenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	S
12. tert-Butylbenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	S
13. Carbon Disulfide	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	S
14. Carbon Tetrachloride	U	V+	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	S
15. Chlorobenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	S
16. Chloroethane	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	. 5
17. Chloroform	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	S
18. Chloromethane	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	S
19.2-Chlorotoluene	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	S
20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	S
21. Dibromochloromethane	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	. 8
22. Dibromomethane	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	. 8
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	. 8
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	. 8
25.1,4-Dichlorobenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	. 8
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	. 8
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	. 8
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	. 8
29.1,1-Dichloroethene	U	L-	μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	. 8
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	. 8
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	. 5
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	. 5
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	08/09/22		08/09/22 13:08		
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	. 8
35. Ethylbenzene	U		μg/L	1.0	1.0	08/09/22	VB22H09A	08/09/22 13:08	VB22H09A	S
36. Ethylene Dibromide	U		μg/L	1.0	1.0	08/09/22		08/09/22 13:08		
37.2-Hexanone	U		μg/L	50	1.0	08/09/22	\/D00L100A	08/09/22 13:08	VESSLIOOA	_

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368

F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584

Page:



Order: A10163 Date: 08/10/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Trip Blank Chain of Custody: 206299

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 08/08/22

Client Project No: 30136112 Sample Matrix: Blank: Trip Collect Time: NA

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS

Aliquot ID: A10163-005 Matrix: Blank: Trip

Method: EPA 5030C/EPA 8260D

Description: Trip Blank

Preparation Analysis Parameter(s) Result Q Units Reporting Limit Dilution P. Date P. Batch A. Date A. Batch Init. 38. Isopropylbenzene U μg/L 5.0 1.0 08/09/22 VB22H09A 08/09/22 13:08 VB22H09A SNC 39.4-Methyl-2-pentanone U 50 1.0 08/09/22 VB22H09A 08/09/22 13:08 VB22H09A SNC µg/L 40. Methylene Chloride U 08/09/22 08/09/22 13:08 VB22H09A μg/L 5.0 1.0 VB22H09A U # 41.2-Methylnaphthalene 5.0 1.0 08/09/22 VB22H09A 08/09/22 13:08 VB22H09A SNC μg/L U μg/L 42. MTBE 5.0 1.0 08/09/22 VB22H09A 08/09/22 13:08 VB22H09A SNC U 43. Naphthalene µg/L 5.0 1.0 08/09/22 VB22H09A 08/09/22 13:08 VB22H09A SNC 44. n-Propylbenzene U 1.0 1.0 08/09/22 VB22H09A 08/09/22 13:08 VB22H09A SNC μg/L 45. Styrene U μg/L 1.0 1.0 08/09/22 VB22H09A 08/09/22 13:08 VB22H09A SNC U 1.0 1.0 08/09/22 VB22H09A 08/09/22 13:08 VB22H09A SNC 46. 1.1.1.2-Tetrachloroethane μg/L U 47.1,1,2,2-Tetrachloroethane 1.0 1.0 08/09/22 VB22H09A 08/09/22 13:08 VB22H09A SNC µg/L U 48. Tetrachloroethene μg/L 1.0 1.0 08/09/22 VB22H09A 08/09/22 13:08 VB22H09A SNC 49. Toluene U 1.0 1.0 08/09/22 VB22H09A 08/09/22 13:08 VB22H09A SNC μg/L U 50. 1.2.4-Trichlorobenzene 5.0 1 0 08/09/22 VB22H09A 08/09/22 13:08 VB22H09A SNC μg/L U 51.1,1,1-Trichloroethane μg/L 1.0 1.0 08/09/22 VB22H09A 08/09/22 13:08 VB22H09A SNC U 08/09/22 ‡ 52.1,1,2-Trichloroethane μg/L 1.0 1.0 VB22H09A 08/09/22 13:08 VB22H09A SNC U 53. Trichloroethene µq/L 1.0 1.0 08/09/22 VB22H09A 08/09/22 13:08 VB22H09A SNC U 1.0 54. Trichlorofluoromethane μg/L 1.0 08/09/22 VB22H09A 08/09/22 13:08 VB22H09A SNC 55. 1,2,3-Trichloropropane U 1.0 1.0 08/09/22 VB22H09A 08/09/22 13:08 VB22H09A SNC μg/L ‡ 56.1,2,3-Trimethylbenzene U μg/L 1.0 1.0 08/09/22 VB22H09A 08/09/22 13:08 VB22H09A SNC U 1.0 08/09/22 VB22H09A 08/09/22 13:08 VB22H09A SNC 57. 1,2,4-Trimethylbenzene 1.0 μg/L 58.1,3,5-Trimethylbenzene U μg/L 1.0 1.0 08/09/22 VB22H09A 08/09/22 13:08 VB22H09A SNC 59. Vinyl Chloride U 1.0 1.0 VB22H09A 08/09/22 13:08 VB22H09A SNC μg/L 08/09/22 60. m&p-Xylene U 2.0 1.0 08/09/22 VB22H09A 08/09/22 13:08 VB22H09A SNC μg/L 61. o-Xylene U 1.0 1.0 08/09/22 VB22H09A 08/09/22 13:08 VB22H09A SNC µg/L U VB22H09A 08/09/22 13:08 VB22H09A SNC ‡ 62. Xylenes μg/L 3.0 1.0 08/09/22 **Surrogate Summary Control Limits** Instrument Run Time <u>Column</u> Inst. Method Batch 4-Bromofluorobenzene(S) 98 % 80-120 VΒ VB22H09A 8/9/2022 13:08 **VBWAT VBWAT** Dibromofluoromethane(S) 94 % 80-120 VR. VB22H09A 8/9/2022 13:08 1 1,2-Dichloroethane-d4(S) 100 % 80-120 VΒ VB22H09A 8/9/2022 13:08 1 **VBWAT** Toluene-d8(S) 101 % 80-120 VΒ VB22H09A 8/9/2022 13:08 **VBWAT**

> 1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail

Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368 F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584

Page:



Analytical Laboratory Report Laboratory Project Number: A10163

Order: A10163 Date: 08/10/22

Definitions/ Qualifiers:

- A: Spike recovery or precision unusable due to dilution.
- **B:** The analyte was detected in the associated method blank.
- E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
- J: The concentration is an estimated value.
- M: Modified Method
- **U:** The analyte was not detected at or above the reporting limit.
- X: Matrix Interference has resulted in a raised reporting limit or distorted result.
- **W:** Results reported on a wet-weight basis.
- *: Value reported is outside QC limits
- **D:** The sample or extract was analyzed at a DF greater than 1.

Exception Summary:

L : Recovery in the associated laboratory sample (LCS) exceeds the lower control limit. Results may be biased low.
 V+
 : Recovery in the associated continuing calibration verification sample (CCV) exceeds the upper control limit. Results

may be biased high.

Analysis Locations:

All analyses performed in Holt.



Accreditation Number(s):

T104704518-19-8 (TX)



Order ID: A10163 Page: 1 of 5 Date: 08/10/22

VB22H09A: Method Blank (MB)

Run Time: VB22H09A.MB 08/09/2022 12:18	[VB22H09A]				
	MB Result MB	MB RDL			
	Qualif	ier			
Analyte	μg/L	μg/L			
Acetone	U	50			
Acrylonitrile	U	2.0			
Benzene	U	1.0			
Bromobenzene	U	1.0			
Bromochloromethane	U	1.0			
Bromodichloromethane	U	1.0			
Bromoform	U	1.0			
Bromomethane	U	5.0			
2-Butanone	U	25			
n-Butylbenzene	U	1.0			
sec-Butylbenzene	U	1.0			
tert-Butylbenzene	U	1.0			
Carbon Disulfide	U	5.0			
Carbon Tetrachloride	U	1.0			
Chlorobenzene	U	1.0			
Chloroethane	U	5.0			
Chloroform	U	1.0			
Chloromethane	U	5.0			
2-Chlorotoluene	U	5.0			
1,2-Dibromo-3-chloropropane (SIM)	U	1.0			
Dibromochloromethane	U	5.0			
Dibromomethane	U	5.0			
1,2-Dichlorobenzene	U	1.0			
1,3-Dichlorobenzene	U	1.0			
1,4-Dichlorobenzene	U	1.0			
Dichlorodifluoromethane	U	5.0			
1,1-Dichloroethane	U	1.0			
1,2-Dichloroethane	U	1.0			
1,1-Dichloroethene	U	1.0			
cis-1,2-Dichloroethene	U	1.0			
rans-1,2-Dichloroethene	U	1.0			
1,2-Dichloropropane	U	1.0			
cis-1,3-Dichloropropene	U	0.50			
	1914 Holloway Drive	Holt, MI 48842	T: (517) 699-0345	F: (517) 699-0388	
	11766 E. Grand River	Brighton, MI 48116	T: (810) 220-3300	F: (810) 220-3311	

lab@fibertec.us RSN: VB22H09A-222220810140431

F: (231) 775-8584

T: (231) 775-8368

8660 S. Mackinaw Trail

Cadillac, MI 49601



Order ID: A10163 Page: 2 of 5 Date: 08/10/22

VB22H09A: Method Blank (MB)

Run Time: VB22H09A.MB 08/09/2022 12:18 [VI	B22H09A]		
	MB Result	MB	MB RDL
		Qualifier	
Analyte	μg/L		μg/L
trans-1,3-Dichloropropene	U		0.50
Ethylbenzene	U		1.0
Ethylene Dibromide	U		1.0
2-Hexanone	U		50
Isopropylbenzene	U		5.0
4-Methyl-2-pentanone	U		50
Methylene Chloride	U		5.0
2-Methylnaphthalene	U		5.0
MTBE	U		5.0
Naphthalene	U		5.0
n-Propylbenzene	U		1.0
Styrene	U		1.0
1,1,1,2-Tetrachloroethane	U		1.0
1,1,2,2-Tetrachloroethane	U		1.0
Tetrachloroethene	U		1.0
Toluene	U		1.0
1,2,4-Trichlorobenzene	U		5.0
1,1,1-Trichloroethane	U		1.0
1,1,2-Trichloroethane	U		1.0
Trichloroethene	U		1.0
Trichlorofluoromethane	U		1.0
1,2,3-Trichloropropane	U		1.0
1,2,3-Trimethylbenzene	U		1.0
1,2,4-Trimethylbenzene	U		1.0
1,3,5-Trimethylbenzene	U		1.0
Vinyl Chloride	U		1.0
m&p-Xylene	U		2.0
o-Xylene	U		1.0
4-Bromofluorobenzene(S)	100		80-120
Dibromofluoromethane(S)	96		80-120
1,2-Dichloroethane-d4(S)	99		80-120
Toluene-d8(S)	99		80-120

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Order ID: A10163 Page: 3 of 5 Date: 08/10/22

VB22H09A: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VB22H09A.LCS: 08/09/2022 11:04	1 [VB22H09A] VB22	2H09A.LCSD: 08/09	/2022 11:28 [V	B22H09A]								
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Am	ount			Qualifier	Spike Amou	ınt Result	Rec.	Qualifier			Qualifier
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
Acetone	50.0	22.2	44	40-130		50.0	20.6	41		7	20	
Acrylonitrile	50.0	49.0	98	70-130		50.0	49.5	99		1	20	
Benzene	50.0	48.6	97	80-120		50.0	46.4	93		4	20	
Bromobenzene	50.0	45.7	91	75-125		50.0	45.1	90		1	20	
Bromochloromethane	50.0	50.7	101	70-130		50.0	49.7	99		2	20	
Bromodichloromethane	50.0	56.6	113	75-120		50.0	55.6	111		2	20	
Bromoform	50.0	50.9	102	70-130		50.0	49.9	100		2	20	
Bromomethane	50.0	56.4	113	68-135		50.0	52.9	106		6	20	
2-Butanone	50.0	32.3	65	40-129		50.0	32.7	65		0	20	
n-Butylbenzene	50.0	49.9	100	70-133		50.0	47.6	95		5	20	
sec-Butylbenzene	50.0	51.3	103	70-125		50.0	49.2	98		5	20	
ert-Butylbenzene	50.0	50.0	100	70-130		50.0	48.2	96		4	20	
Carbon Disulfide	50.0	57.5	115	70-130		50.0	55.8	112		3	20	
Carbon Tetrachloride	50.0	57.8	116	70-130		50.0	54.0	108		7	20	
Chlorobenzene	50.0	51.2	102	80-120		50.0	48.9	98		4	20	
Chloroethane	50.0	53.0	106	61-130		50.0	48.5	97		9	20	
Chloroform	50.0	51.5	103	80-120		50.0	49.4	99		4	20	
Chloromethane	50.0	50.5	101	67-125		50.0	46.6	93		8	20	
2-Chlorotoluene	50.0	47.2	94	75-125		50.0	46.6	93		1	20	
1,2-Dibromo-3-chloropropane (SIM)	50.0	51.6	103	70-130		50.0	55.3	111		7	20	
Dibromochloromethane	50.0	56.4	113	70-130		50.0	56.2	112		1	20	
Dibromomethane	50.0	51.6	103	75-125		50.0	50.3	101		2	20	
1,2-Dichlorobenzene	50.0	49.2	98	70-120		50.0	49.0	98		0	20	
1,3-Dichlorobenzene	50.0	49.3	99	75-125		50.0	48.7	97		2	20	
1,4-Dichlorobenzene	50.0	47.5	95	75-125		50.0	46.4	93		2	20	
Dichlorodifluoromethane	50.0	60.0	120	70-136		50.0	54.9	110		9	20	
1,1-Dichloroethane	50.0	48.6	97	70-130		50.0	45.6	91		6	20	
1,2-Dichloroethane	50.0	45.0	90	70-130		50.0	44.2	88		2	20	
1,1-Dichloroethene	50.0	42.3	85	78-120		50.0	38.3	77	*	10	20	
cis-1,2-Dichloroethene	50.0	47.3	95	70-125		50.0	45.5	91		4	20	
rans-1,2-Dichloroethene	50.0	46.6	93	70-130		50.0	43.1	86		8	20	
1,2-Dichloropropane	50.0	51.1	102	80-121		50.0	49.0	98		4	20	
cis-1,3-Dichloropropene	50.0	53.4	107	70-130		50.0	53.2	106		1	20	

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Order ID: A10163 Page: 4 of 5 Date: 08/10/22

VB22H09A: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VB22H09A.LCS: 08/09/2022 11	I:04 [VB22H09A] VB22	H09A.LCSD: 08/09	/2022 11:28 [V	B22H09A]								
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Am	ount			Qualifier	Spike Amoun	t Result	Rec.	Qualifier			Qualifier
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
trans-1,3-Dichloropropene	50.0	55.4	111	70-132		50.0	53.4	107		4	20	
Ethylbenzene	50.0	53.4	107	80-120		50.0	50.1	100		7	20	
Ethylene Dibromide	50.0	51.5	103	80-120		50.0	51.4	103		0	20	
2-Hexanone	50.0	36.5	73	70-130		50.0	37.0	74		1	20	
Isopropylbenzene	50.0	52.7	105	75-125		50.0	49.7	99		6	20	
4-Methyl-2-pentanone	50.0	52.4	105	70-130		50.0	51.6	103		2	20	
Methylene Chloride	50.0	39.4	79	70-130		50.0	37.9	76		4	20	
2-Methylnaphthalene	50.0	49.1	98	70-130		50.0	51.9	104		6	20	
MTBE	50.0	50.6	101	70-125		50.0	49.2	98		3	20	
Naphthalene	50.0	47.4	95	70-130		50.0	51.3	103		8	20	
n-Propylbenzene	50.0	50.9	102	70-130		50.0	49.8	100		2	20	
Styrene	50.0	49.0	98	70-130		50.0	48.0	96		2	20	
1,1,1,2-Tetrachloroethane	50.0	58.0	116	80-130		50.0	56.3	113		3	20	
1,1,2,2-Tetrachloroethane	50.0	51.2	102	70-130		50.0	51.2	102		0	20	
Tetrachloroethene	50.0	53.3	107	70-130		50.0	50.0	100		7	20	
Toluene	50.0	50.8	102	80-120		50.0	48.7	97		5	20	
1,2,4-Trichlorobenzene	50.0	49.9	100	70-130		50.0	50.8	102		2	20	
1,1,1-Trichloroethane	50.0	57.5	115	70-130		50.0	54.7	109		5	20	
1,1,2-Trichloroethane	50.0	53.2	106	75-125		50.0	51.7	103		3	20	
Trichloroethene	50.0	50.7	101	71-125		50.0	48.6	97		4	20	
Trichlorofluoromethane	50.0	56.7	113	70-133		50.0	53.8	108		5	20	
1,2,3-Trichloropropane	50.0	48.7	97	75-125		50.0	51.6	103		6	20	
1,2,3-Trimethylbenzene	50.0	47.1	94	70-130		50.0	46.5	93		1	20	
1,2,4-Trimethylbenzene	50.0	51.3	103	75-130		50.0	50.6	101		2	20	
1,3,5-Trimethylbenzene	50.0	50.3	101	75-130		50.0	49.7	99		2	20	
Vinyl Chloride	50.0	51.0	102	74-125		50.0	48.2	96		6	20	
m&p-Xylene	100	104	104	75-130		100	99.6	100		4	20	
o-Xylene	50.0	49.4	99	80-120		50.0	47.5	95		4	20	
4-Bromofluorobenzene(S)			101	80-120				101				
Dibromofluoromethane(S)			103	80-120				103				
1,2-Dichloroethane-d4(S)			101	80-120				100				
Toluene-d8(S)			100	80-120				100				

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Order ID: A10163
Page: 5 of 5
Date: 08/10/22

Definitions/ Qualifiers:

- U: The analyte was not detected at or above the Reporting Limit (RL).
- *: Value reported is outside QC limits

Exception Summary:

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

Report Generated By:

By Jacob Sutherlund at 2:06 PM, Aug 10, 2022

RSN: VB22H09A-222220810140431



Analytical Laboratory

1914 Holloway Drive Holt, MI 48842 8660 S. Mackinaw Trail Cadillac, MI 49601

Phone: 517 699 0345 Fax: 517 699 0388

Phone: 231 775 8368

Fax: 231 775 8584

Geoprobe

11766 E. Grand River Rd. Brighton, MI 48116

Phone: 810 220 3300 Fax: 810 220 3311 Chain of Custody # 206299

em	ail: lab@fibertec.us										
Client Name: Avcades						PARA	∧ETERS		I	Matrix Code	Deliverables
Contact Person: Stacey	tannula								1	S Soil Gw Ground Water	X Level 2
Project Name / Number										A Air Sw Surface Water	Level 3
30/36/12 TEV	N Mittord	CODE		0					<u> </u>	O Oil ww Waste Water	Level 4
Email distribution list: Stacey ha	nnula@arcadis.com nnis@arcadis.com	MATRIX (SEE RIGHT CORNER FOR CODE)	# OF CONTAINERS	8260F				HOLD SAMPLE		P Wipe X Other: Specify	EDD
Quote#		SEE RIG	ATNC	8					1		
Purchase Order# 30136112	-	TRIX	N C	00							
Date Time Sample #	Client Sample Descriptor	_	-	-		_			R	Remarks:	
5.8.22 0910	W-16D2-080822	6W	3	*		4			1	W8hTXT	
	W-16D2R1-080822	GW	3	*					_	WShTAT	
88.22 1125 0	W-16D2R2-080822	GW	3	X						rush tat	
8822 1110 F	IELDBLANK-080822	8	3	×	in in			1		Std. TAT ok	
T	RIPBLANKZ	X	3	X					4	Std. TAT OR	
	pH dest kit		1						<	from ow. 16 DERI Sample	
									+	Received By Lab	
									1	AUG 0 8 2022	
Comments:									,	Initials: 55	1
Sampled/Relinquished By: Stacey Hantwa 874	Ahly/Arcadis	Bate	8.7	12	1240	Rece	lved By:	n A	1	ett	
Relinquished by:	att		e/ Time			Rece	Mad By	al .	1	hal 8/8/22 -	5 175
Relinquisped by:	M	12/10	/ Time		18:30	RECE	eived By Lo	boratory:	5	2	
481	OUND TIME ALL RESULTS WILL BE SENT BY THE END O					1	//	File auto a so		LAB USE ONLY	
1 bus. day	days3 bus. days Other (specify time/date requirement):		4 b	us. a				A101 Temperatu	6 ure	upon receipt at Lab:	eived In Ice
	Plans	G (A)	- ha	ick	for terms ar	nd co	ndition		Ч,	2	



Tuesday, September 13, 2022

Fibertec Project Number: A10763

Project Identification: TRW Milford (30136112) /30136112

Submittal Date: 09/08/2022

Ms. Stacey Hannula Arcadis U.S., Inc. - Novi 28550 Cabot Drive Suite 500 Novi, MI 48377

Dear Ms. Hannula,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

By Bailey Welch at 4:59 PM, Sep 13, 2022

Bailey Welch

For Daryl P. Strandbergh Laboratory Director

Enclosures



Order: Date:

A10763 09/13/22

OW-16D2_090822 212794 Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Chain of Custody:

09/08/22 Client Project Name: TRW Milford (30136112) Sample No: Collect Date:

Description:

OW-16D2_090822

Client Project No: 30136112 Sample Matrix: **Ground Water** Collect Time: 09:20

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Aliquot ID: A10763-001 Matrix: Ground Water Method: EPA 5030C/EPA 8260D

Preparation Analysis Parameter(s) Result O Units Reporting Limit Dilution P. Date P. Batch A. Date A. Batch Init 1. Acetone U μg/L 50 1.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A SNC ± 2. Acrylonitrile U 2.0 10 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A SNC μg/L 3. Benzene U 1.0 1.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A SNC μg/L U 1.0 1 0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A SNC 4 Bromobenzene μg/L U 1.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A SNC 5. Bromochloromethane μg/L 1.0 U 6. Bromodichloromethane μg/L 10 10 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A SNC 7. Bromoform (SIM) U 1.0 1.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A ua/L U 5.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A 8. Bromomethane μg/L 10 SNC 9.2-Butanone U 25 1.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A ua/L U 10. n-Butylbenzene 1.0 1.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A SNC μg/L 11. sec-Butylbenzene U 1.0 1.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A μg/L SNC 12. tert-Butylbenzene U 1.0 1.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A SNC μg/L U 5.0 09/09/22 09/09/22 13:41 VM22I09A SNC 13 Carbon Disulfide µg/L 10 VM22I09A 14. Carbon Tetrachloride U 1.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A μg/L 1.0 15 Chlorobenzene u 1.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A SNC 10 μg/L 16. Chloroethane U 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A μg/L 5.0 1.0 09/09/22 17 Chloroform U 1.0 1.0 VM22I09A 09/09/22 13:41 VM22I09A SNC μg/L U 09/09/22 13:41 VM22I09A 18. Chloromethane 5.0 1.0 09/09/22 VM22I09A ua/L 19. 2-Chlorotoluene U 5.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A SNC μg/L 10 ‡ 20.1,2-Dibromo-3-chloropropane (SIM) U μg/L 1.0 1.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A U 21. Dibromochloromethane μg/L 5.0 1.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A 22. Dibromomethane U μg/L 5.0 1.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A SNC 23. 1,2-Dichlorobenzene U 1.0 1.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A SNC μg/L U 1.0 1.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A 24 1 3-Dichlorobenzene SNC μg/L 25. 1,4-Dichlorobenzene U 1.0 1.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A SNC μg/L U 26 Dichlorodifluoromethane 5.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A SNC μg/L 10 27. 1.1-Dichloroethane 3.9 μg/L 1.0 1.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A SNC U 28. 1.2-Dichloroethane 10 10 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A SNC μg/L U 09/09/22 13:41 VM22I09A SNC 29. 1,1-Dichloroethene 1.0 1.0 09/09/22 VM22I09A ua/L 21 09/09/22 09/09/22 13:41 VM22I09A 30 cis-1 2-Dichloroethene μg/L 10 10 VM22I09A SNC 31. trans-1,2-Dichloroethene 1.8 1.0 1.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A SNC ua/L 32. 1,2-Dichloropropane U 1.0 1.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A SNC μg/L 33. cis-1,3-Dichloropropene U 0.50 1.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A SNC μg/L 34. trans-1,3-Dichloropropene U 0.50 1.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A μg/L U 09/09/22 35. Ethylbenzene μg/L 10 10 VM22I09A 09/09/22 13:41 VM22I09A SNC 36. Ethylene Dibromide U 1.0 09/09/22 VM22I09A 09/09/22 13:41 VM22I09A μg/L 1.0 U VM22I09A 09/09/22 13:41 VM22I09A SNC 37 2-Hexanone μg/L 50 1.0 09/09/22

> 1914 Holloway Drive 11766 E Grand River 8660 S Madkinaw Trail

Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601

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Order: A10763 Date: 09/13/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2_090822 Chain of Custody: 212794

 Client Project Name:
 TRW Milford (30136112)
 Sample No:
 Collect Date:
 09/08/22

Description: OW-16D2_090822

Client Project No: 30136112 Sample Matrix: Ground Water Collect Time: 09:20

Sample Comments:

Method: EPA 5030C/EPA 8260D

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Aliquot ID: A10763-001 Matrix: Ground Water

					Prepar	ation	Ana	alysis	
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	lnit.
38. Isopropylbenzene	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC
39. 4-Methyl-2-pentanone	U	μg/L	50	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC
40. Methylene Chloride	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC
‡ 41.2-Methylnaphthalene	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC
42. MTBE	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC
43. Naphthalene	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC
44. n-Propylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC
45. Styrene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC
46. 1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC
47.1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC
48. Tetrachloroethene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC
49. Toluene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC
50. 1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC
‡ 52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC
53. Trichloroethene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC
55. 1,2,3-Trichloropropane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC
‡ 56.1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC
57. 1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC
58. 1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC
59. Vinyl Chloride	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC
60. m&p-Xylene	U	μg/L	2.0	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC
61. o-Xylene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC
‡ 62. Xylenes	U	μg/L	3.0	1.0	09/09/22	VM22I09A	09/09/22 13:41	VM22I09A	SNC



Order: A10763 Date: 09/13/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2R1_090822 Chain of Custody: 212794

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 09/08/22

Client Project No: 30136112 Sample Matrix: Ground Water Collect Time: 10:07

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Aliquot ID: A10763-002 Matrix: Ground Water

Method: EPA 5030C/EPA 8260D Description: OW-16D2R1_090822

					Prepar	ation	An	alysis	
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	lni
1. Acetone	U	μg/L	50	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SN
2. Acrylonitrile	U	μg/L	2.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	. SN
3. Benzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SN
4. Bromobenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	. S1
5. Bromochloromethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	18
6. Bromodichloromethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	. SI
7. Bromoform (SIM)	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
8. Bromomethane	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	. SI
9.2-Butanone	U	μg/L	25	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
10. n-Butylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	. SI
11. sec-Butylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
12. tert-Butylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
13. Carbon Disulfide	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
14. Carbon Tetrachloride	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
15. Chlorobenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
16. Chloroethane	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
17. Chloroform	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
18. Chloromethane	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
19. 2-Chlorotoluene	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
20.1,2-Dibromo-3-chloropropane (SIM)	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
21. Dibromochloromethane	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
22. Dibromomethane	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
23. 1,2-Dichlorobenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
24. 1,3-Dichlorobenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
25. 1,4-Dichlorobenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
26. Dichlorodifluoromethane	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
27.1,1-Dichloroethane	2.5	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
28. 1,2-Dichloroethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
29. 1,1-Dichloroethene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
30. cis-1,2-Dichloroethene	22	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
31. trans-1,2-Dichloroethene	1.4	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
32. 1,2-Dichloropropane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
33. cis-1,3-Dichloropropene	U	μg/L	0.50	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
34. trans-1,3-Dichloropropene	U	μg/L	0.50	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
35. Ethylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
36. Ethylene Dibromide	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S
37.2-Hexanone	U	μg/L	50	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	S

1914 Holloway Drive 11766 E Grand River 8660 S Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order: A10763 Date: 09/13/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2R1_090822 Chain of Custody: 212794

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 09/08/22

Client Project No: 30136112 Sample Matrix: Ground Water Collect Time: 10:07

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Aliquot ID: A10763-002 Matrix: Ground Water

Method: EPA 5030C/EPA 8260D Description: OW-16D2R1_090822

WIELIIOU. EPA 3030C/EPA 6260D			Des	cription. C	W-10D2K1_030	022			
					Prepar			alysis	
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init
38. Isopropylbenzene	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SNO
39. 4-Methyl-2-pentanone	U	μg/L	50	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SNO
40. Methylene Chloride	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SNO
‡ 41.2-Methylnaphthalene	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SNO
42. MTBE	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SNO
43. Naphthalene	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SNO
44. n-Propylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SNO
45. Styrene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SNO
46. 1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SNO
47. 1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SN
48. Tetrachloroethene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SN
49. Toluene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SN
50. 1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SN
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SN
52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SN
53. Trichloroethene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SNO
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SN
55. 1,2,3-Trichloropropane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SN
56.1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SN
57.1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SNO
58. 1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SNO
59. Vinyl Chloride	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SNO
60. m&p-Xylene	U	μg/L	2.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SNO
61. o-Xylene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SNO
\$ 62. Xylenes	U	μg/L	3.0	1.0	09/09/22	VM22I09A	09/09/22 14:10	VM22I09A	SNO

lab@fibertec.us



Order: Date:

Analysis

A10763 09/13/22

Client Identification: Arcadis U.S., Inc. - Novi OW-16D2R2_090822 Chain of Custody: 212794 Sample Description:

Client Project Name: TRW Milford (30136112) Collect Date: 09/08/22 Sample No:

Description: OW-16D2R2_090822

Preparation

Client Project No: 30136112 Sample Matrix: **Ground Water** Collect Time: 10:55

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Aliquot ID: A10763-003 **Matrix: Ground Water** Method: EPA 5030C/EPA 8260D

					Prepar	auon	Alle	aiysis	
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U	μg/L	50	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNC
‡ 2. Acrylonitrile	U	μg/L	2.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNC
3. Benzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNC
4. Bromobenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNC
5. Bromochloromethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNC
6. Bromodichloromethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNC
‡ 7. Bromoform (SIM)	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNC
8. Bromomethane	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNC
9. 2-Butanone	U	μg/L	25	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNC
10. n-Butylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNC
11. sec-Butylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNC
12. tert-Butylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNC
13. Carbon Disulfide	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNC
14. Carbon Tetrachloride	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNC
15. Chlorobenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNC
16. Chloroethane	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNC
17. Chloroform	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNC
18. Chloromethane	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNC
19. 2-Chlorotoluene	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNC
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNC
21. Dibromochloromethane	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNC
22. Dibromomethane	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNC
23. 1,2-Dichlorobenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNC
24. 1,3-Dichlorobenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNC
25. 1,4-Dichlorobenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNC
26. Dichlorodifluoromethane	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNC
27.1,1-Dichloroethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNC
28. 1,2-Dichloroethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNC
29. 1,1-Dichloroethene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNC
30. cis-1,2-Dichloroethene	12	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNC
31. trans-1,2-Dichloroethene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNC
32.1,2-Dichloropropane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNC
33. cis-1,3-Dichloropropene	U	μg/L	0.50	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNC
34. trans-1,3-Dichloropropene	U	μg/L	0.50	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNC
35. Ethylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNC
33. Littyiberizerie									
36. Ethylene Dibromide	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SNC

1914 Holloway Drive 11766 E Grand River 8660 S Madkinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601

T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order: A10763 Date: 09/13/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2R2_090822 Chain of Custody: 212794

 Client Project Name:
 TRW Milford (30136112)
 Sample No:
 Collect Date:
 09/08/22

Client Project No: 30136112 Sample Matrix: Ground Water Collect Time: 10:55

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Aliquot ID: A10763-003 Matrix: Ground Water

Method: EPA 5030C/EPA 8260D Description: OW-16D2R2_090822

WELIIOG. EI A 30300/EI A 0200D			DCS	cription. C	W-10DZIXZ_030	OLL			
					Prepar	ation	Ana	alysis	
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	lni
38. Isopropylbenzene	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SN
39. 4-Methyl-2-pentanone	U	μg/L	50	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SN
40. Methylene Chloride	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SI
41.2-Methylnaphthalene	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SI
42. MTBE	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SI
43. Naphthalene	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SI
44. n-Propylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SI
45. Styrene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SI
46. 1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SI
47. 1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	S
48. Tetrachloroethene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	S
49. Toluene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	S
50. 1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	S
51. 1,1,1-Trichloroethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	S
52. 1,1,2-Trichloroethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	S
53. Trichloroethene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	S
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SI
55. 1,2,3-Trichloropropane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	S
56. 1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	S
57. 1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	S
58. 1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	S
59. Vinyl Chloride	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SI
60. m&p-Xylene	U	μg/L	2.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SI
61. o-Xylene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	SI
‡ 62. Xylenes	U	μg/L	3.0	1.0	09/09/22	VM22I09A	09/09/22 14:38	VM22I09A	S



Order: A
Date: 0

A10763 09/13/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: TRIP BLANK Chain of Custody: 212794

 Client Project Name:
 TRW Milford (30136112)
 Sample No:
 Collect Date:
 09/08/22

Client Project No: 30136112 Sample Matrix: Blank: Trip Collect Time: NA

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS

Aliquot ID: A10763-004 Matrix: Blank: Trip

Method: EPA 5030C/EPA 8260D

Description: TRIP BLANK

						Prepar	ation		alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	lnit.
1. Acetone	U		μg/L	50	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNO
2. Acrylonitrile	U		μg/L	2.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNO
3. Benzene	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNO
4. Bromobenzene	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNO
5. Bromochloromethane	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNO
6. Bromodichloromethane	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNO
7. Bromoform (SIM)	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNO
8. Bromomethane	U		μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNO
9. 2-Butanone	U		μg/L	25	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNO
10. n-Butylbenzene	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNO
11. sec-Butylbenzene	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
12. tert-Butylbenzene	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
13. Carbon Disulfide	U		μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
15. Chlorobenzene	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
16. Chloroethane	U		μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
17. Chloroform	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
18. Chloromethane	U		μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
19. 2-Chlorotoluene	U		μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
21. Dibromochloromethane	U		μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
22. Dibromomethane	U		μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
27. 1,1-Dichloroethane	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
28. 1,2-Dichloroethane	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
29. 1,1-Dichloroethene	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
32. 1,2-Dichloropropane	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
35. Ethylbenzene	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
36. Ethylene Dibromide	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SN
37.2-Hexanone	U		μg/L	50	1.0	09/09/22	VM22I09A	09/09/22 12:16		

1914 Holloway Drive 11766 E Grand River 8660 S Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order: A10763 Date: 09/13/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: TRIP BLANK Chain of Custody: 212794

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 09/08/22

Client Project No: 30136112 Sample Matrix: Blank: Trip Collect Time: NA

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS

Aliquot ID: A10763-004 Matrix: Blank: Trip

Method: EPA 5030C/EPA 8260D

Description: TRIP BLANK

					Prepar	ation	Ana	alysis	
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	lnit.
38. Isopropylbenzene	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC
39. 4-Methyl-2-pentanone	U	μg/L	50	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC
40. Methylene Chloride	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC
‡ 41.2-Methylnaphthalene	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC
42. MTBE	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC
43. Naphthalene	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC
44. n-Propylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC
45. Styrene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC
46. 1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC
47.1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC
48. Tetrachloroethene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC
49. Toluene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC
50. 1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC
‡ 52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC
53. Trichloroethene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC
55. 1,2,3-Trichloropropane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC
‡ 56.1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC
57. 1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC
58. 1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC
59. Vinyl Chloride	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC
60. m&p-Xylene	U	μg/L	2.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC
61. o-Xylene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC
‡ 62. Xylenes	U	μg/L	3.0	1.0	09/09/22	VM22I09A	09/09/22 12:16	VM22I09A	SNC



Order: A10763 Date: 09/13/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: FIELD BLANK_090822 Chain of Custody: 212794

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 09/08/22

Client Project No: 30136112 Sample Matrix: Blank: Field Collect Time: 10:40

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Aliquot ID: A10763-005 Matrix: Blank: Field

Method: EPA 5030C/EPA 8260D Description: FIELD BLANK_090822

						Prepara	ation	Ana	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	In
1. Acetone	U		μg/L	50	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SI
2. Acrylonitrile	U		μg/L	2.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	S
3. Benzene	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	S
4. Bromobenzene	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	S
5. Bromochloromethane	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	S
6. Bromodichloromethane	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	S
7. Bromoform (SIM)	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	K
8. Bromomethane	U		μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	S
9. 2-Butanone	U		μg/L	25	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	S
10. n-Butylbenzene	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	S
11. sec-Butylbenzene	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	S
12. tert-Butylbenzene	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	S
13. Carbon Disulfide	U		μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	S
14. Carbon Tetrachloride	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	S
15. Chlorobenzene	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	S
16. Chloroethane	U		μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	S
17. Chloroform	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	S
18. Chloromethane	U		μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	S
19. 2-Chlorotoluene	U		μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	S
20.1,2-Dibromo-3-chloropropane (SIM)	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	S
21. Dibromochloromethane	U		μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	S
22. Dibromomethane	U		μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	S
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	S
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	S
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	S
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	S
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	S
28. 1,2-Dichloroethane	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	S
29. 1,1-Dichloroethene	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	S
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	S
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	S
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	S
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	S
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	S
35. Ethylbenzene	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	S
36. Ethylene Dibromide	U		μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	S
37.2-Hexanone	U		μg/L	50	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	S

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Order: A10763 Date: 09/13/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: FIELD BLANK_090822 Chain of Custody: 212794

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 09/08/22

Client Project No: 30136112 Sample Matrix: Blank: Field Collect Time: 10:40

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS Aliquot ID: A10763-005 Matrix: Blank: Field

Method: EPA 5030C/EPA 8260D Description: FIELD BLANK_090822

Wethod. Li A 30300/Li A 0200D			Des	cription. I	ILLD DLAM_0	0022			
					Prepar	ation	An	alysis	
Parameter(s)	Result	Q Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init
38. Isopropylbenzene	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN
39. 4-Methyl-2-pentanone	U	μg/L	50	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN
40. Methylene Chloride	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN
41.2-Methylnaphthalene	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN
42. MTBE	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN
43. Naphthalene	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN
44. n-Propylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN
45. Styrene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN
46. 1,1,1,2-Tetrachloroethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN
47. 1,1,2,2-Tetrachloroethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN
48. Tetrachloroethene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN
49. Toluene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN
50. 1,2,4-Trichlorobenzene	U	μg/L	5.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN
51.1,1,1-Trichloroethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN
52.1,1,2-Trichloroethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN
53. Trichloroethene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN
54. Trichlorofluoromethane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN
55. 1,2,3-Trichloropropane	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN
56. 1,2,3-Trimethylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN
57. 1,2,4-Trimethylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN
58. 1,3,5-Trimethylbenzene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN
59. Vinyl Chloride	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN
60. m&p-Xylene	U	μg/L	2.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN
61. o-Xylene	U	μg/L	1.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN
‡ 62. Xylenes	U	μg/L	3.0	1.0	09/09/22	VM22I09A	09/09/22 12:44	VM22I09A	SN



Analytical Laboratory Report Laboratory Project Number: A10763

Order: A10763 Date: 09/13/22

Definitions/ Qualifiers:

- A: Spike recovery or precision unusable due to dilution.
- **B:** The analyte was detected in the associated method blank.
- E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
- J: The concentration is an estimated value.
- M: Modified Method
- **U:** The analyte was not detected at or above the reporting limit.
- X: Matrix Interference has resulted in a raised reporting limit or distorted result.
- W: Results reported on a wet-weight basis.
- *: Value reported is outside QC limits

Exception Summary:

Analysis Locations:

All analyses performed in Holt.



Accreditation Number(s):

T104704518-22-14 (TX)



Order ID: A10763
Page: 1 of 5
Date: 09/13/22

VM22I09A: Method Blank (MB)

Run Time: VM22I09A.MB 09/09/2022 11:19 [VM22	109A]					
	MB Result	MB	MB RDL			
		Qualifier				
Analyte	μg/L		μg/L			
Acetone	U		50			
Acrylonitrile	U		2.0			
Benzene	U		1.0			
Bromobenzene	U		1.0			
Bromochloromethane	U		1.0			
Bromodichloromethane	U		1.0			
Bromomethane	U		5.0			
2-Butanone	U		25			
n-Butylbenzene	U		1.0			
sec-Butylbenzene	U		1.0			
tert-Butylbenzene	U		1.0			
Carbon Disulfide	U		5.0			
Carbon Tetrachloride	U		1.0			
Chlorobenzene	U		1.0			
Chloroethane	U		5.0			
Chloroform	U		1.0			
Chloromethane	U		5.0			
2-Chlorotoluene	U		5.0			
1,2-Dibromo-3-chloropropane (SIM)	U		1.0			
Dibromochloromethane	U		5.0			
Dibromomethane	U		5.0			
1,2-Dichlorobenzene	U		1.0			
1,3-Dichlorobenzene	U		1.0			
1,4-Dichlorobenzene	U		1.0			
Dichlorodifluoromethane	U		5.0			
1,1-Dichloroethane	U		1.0			
1,2-Dichloroethane	U		1.0			
1,1-Dichloroethene	U		1.0			
cis-1,2-Dichloroethene	U		1.0			
trans-1,2-Dichloroethene	U		1.0			
1,2-Dichloropropane	U		1.0			
cis-1,3-Dichloropropene	U		0.50			
trans-1,3-Dichloropropene	U		0.50			
	1014 Holloway Driv	_	LH+ MI 18812	T: (517) 600 02/5	E (517) 600 0299	

1914 Holloway Drive 11766 E Grand River 8660 S Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order ID: A10763
Page: 2 of 5
Date: 09/13/22

VM22I09A: Method Blank (MB)

Analyte yolk yolk Ethylbenzone U 1.0 Ethylbenzone U 1.0 Ethylbenzone U 5.0 Alexanne U 5.0 Isopropybenzone U 5.0 Methyl-zepertanone U 5.0 Methylsen Chioride U 5.0 2-Methylaphthalene U 5.0 Methylene Chioride U 5.0 Napthalene U 5.0 Napthalene U 5.0 Napthalene U 5.0 Napthalene U 6.0 Napthalene U 1.0 1,1-2-riendolocethane U 1.0 1,1-2-riendolocethane U 1.0 1,2-4-richdorochane U 1.0 1,1-1-richdorochane U 1.0 1,1-1-richdorochane U 1.0 1,1-1-richdorochane U 1.0 1,2-4-richdorochane U 1.0	Run Time: VM22I09A.MB 09/09/2022 11:19 [VM22I09A			
Analyte µg/L µg/L Ethylonozono U 1.0 2-Hexanone U 50 Estryper Dicorde U 50 4-Mothyl-2-portatrono U 50 Methylere Chioride U 50 2-Methylaphalene U 50 MTBE U 50 Naphthalene U 50 Naphthalene U 1.0 Propoplerace U 1.0 Syrane U 1.0 1.1.2-Tetachlorochane U 1.0 1.1.2-Tetachlorochane U 1.0 1.2-A-Trichlorochane U 1.0 1.1.1-Trichlorochane U 1.0 1.2.3-Trichlorochane U 1.0 <tr< th=""><th></th><th>MB Result</th><th></th><th>MB RDL</th></tr<>		MB Result		MB RDL
Ellyberozone U 10 Ellybero Dibromide U 60 Legoropionizone U 50 Legoropionizone U 50 Methylare Chloride U 50 Methylare Chloride U 50 Methylare Chloride U 50 Maphitaine U 50 Naphtaine U 50 Naphtaine U 10 Syene U 10 Syene U 10 Syene U 10 1.1.2-2-Tetachlorochane U 10 Tetrachlorochane U 10 Tetrachlorochane U 10 Tall-2-Trichlorochane U 10 1.1.1-1:richlorochane U 10 Tichlorochane U			Qualifier	
Ethylane Dibromide U 1.0 2-Hexanone U 50 Bopcorpolarone U 50 4-Methy-2-pentanone U 50 Methylene Chloride U 50 2-Methylinaphthalene U 50 NPEE U 50 N-Procybenzone U 1.0 Syrane U 1.0 1,1,1,2-Tetachloroethane U 1.0 1,1,2-Tetachloroethane U 1.0 1,2-Trichlorobenzone U 1.0 1,2-Trichloroethane U 1.0 1,2-Trichloroethane U 1.0 1,2-Trichloroethane U 1.0 1,2-Trichloroethane U 1.0 1,1-Trichloroethane U 1.0 1,2-Trichloroethane U				
2-Hexanone U 50 Isoproplybenzene U 50 Admityl-2-pentanone U 50 Methylene Chloride U 50 2-Methylaphthalene U 50 Naphthalene U 50 Naphthalene U 50 N-Propybenzene U 10 Styene U 10 1.1.2-Tetrachloroethane U 10 1.1.2-Tetrachloroethane U 10 Toluene U 10 1.4-A-Trinchloroethane U 10 1.1.1-Trichloroethane U 10 1.1.1-Trichloroethane U 10 1.1.1-Trichloroethane U 10 1.1.2-Trinchloroethane U 10 1.2.3-Trinchloroethane U 10 1.2.3-Trinchloroethane U 10 1.2.3-Trinchloroethane U 10 1.2.3-Trinchloroethane U 10 1.3.5-Trinchloroethane U <				
Isopropybenzne U 5.0 4-Methyl-2-pentanore U 5.0 Methylane Chotoride U 5.0 2-Mothylnaphthalene U 5.0 MTBE U 5.0 Naphthalene U 5.0 n-Propybenzene U 1.0 Styrene U 1.0 1,1,2-Terachloroethane U 1.0 1,1,2-Terachloroethane U 1.0 Toluene U 1.0 1,2,2-Trichloroethane U 1.0 1,1,4-Trichlorobethane U 1.0 1,1,2-Trichloroethane U 1.0 1,2-Trichloroethane U 1.0 1,2-Trichloropethane U 1.0 1,2,3-Trichloroperpane U 1.0 1,2,3-Trichloroperpane U 1.0 1,2,3-Trimethylbenzene U 1.0 Viry Chride U 1.0 Map-Xylore U 2.0 Viry Chride U 2.0				
4-Methyl-2-pentanone U 50 Methylere Chloride U 5.0 2-Methylaphthalene U 5.0 NTBE U 5.0 Naphthalene U 5.0 P-Popylberzene U 1.0 Styrene U 1.0 1.1.1,2-Erterachiorethane U 1.0 1.2,2-Tertachlorethane U 1.0 Toluene U 1.0 Toluene U 1.0 1.1,1-Trichlorethane U 1.0 1.1,1-Trichlorethane U 1.0 1.1,1-Trichlorethane U 1.0 1.1,2-Trinchlorethane U 1.0 Trichlorethane U 1.0 1.2,3-Trinchlyderzene U 1.0 1.2,3-Trinchlyderzene U 1.0 1.3,5-Trinchlyderzene U 1.0 Willyd Chloride U 1.0 Willyd Chloride U 2.0 Cykpen U 2.0				
Methylene Chloride U 5.0 2-Methylnaphthalene U 5.0 MTEE U 5.0 Naphthalene U 5.0 n-Propybenzene U 1.0 Styrene U 1.0 1.1,2-Tetrachloroethane U 1.0 1.2,2-Tetrachloroethane U 1.0 Toluene U 1.0 1,2-Trichloroethane U 1.0 1,2-Trichloroethane U 1.0 1,2-Trichloroethane U 1.0 Trichloroethane U 1.0 1,2-Trinelryberzene U 1.0 1,2-S-Trimethylberzene U 1.0 1,2-S-Trimethylberzene U 1.0 Viny Chloride U 1.0 Winy Chloride U 1.0				
2-Methylnaphthalene U 5.0 MTBE U 5.0 Naphthalene U 5.0 n-Propylbenzene U 1.0 Styrene U 1.0 1.1.2-Tetrachioroethane U 1.0 1.1.2-Tetrachiorebtane U 1.0 Tetrachiorebtane U 1.0 1.2-A-Trichlorobenzene U 5.0 1.3-Irrichloroethane U 1.0 1.4-Z-Trichloroethane U 1.0 Trichloroethane U 1.0 Trichloroethane U 1.0 1.2-3-Trinchloropopane U 1.0 1.2-3-Trinchloropopane U 1.0 1.2-3-Trinchloropopane U 1.0 1.2-3-Trinchloropopane U 1.0 1.3-5-Trinchloropopane U 1.0 1.3-Trinchloropopane U 1.0 1.3-Trinchloropopane U 1.0 1.3-Trinchloropopane U 1.0 1.3-Trinchloropopane		U		50
MTBE U 5.0 Naphthalene U 5.0 Propylbenzene U 1.0 Styrene U 1.0 1,1,2-Fetrachloroethane U 1.0 1,1,2-Fetrachloroethane U 1.0 Toluene U 1.0 1,2-Arrichloroethane U 5.0 1,1,1-Trichloroethane U 1.0 1,1,2-Trichloroethane U 1.0 Trichloroethane U 1.0 Trichloroethane U 1.0 Trichloroethane U 1.0 1,2-Arrichloropopane U 1.0 1,2-3-Trimethybenzene U 1.0 1,2-3-Trimethybenzene U 1.0 1,2-4-Trimethybenzene U 1.0 Viny Chloride U 1.0 Map-Xylene U 2.0 o-Xylene U 1.0 4-Bromofluoromethane(S) 106 80-120		U		5.0
Naphthalene U 5.0 n-Propherzere U 1.0 Styrene U 1.0 1,1,1.2-Tetrachloroethane U 1.0 1,1,2.2-Tetrachloroethane U 1.0 Tetrachloroethane U 1.0 12,4-Trichlorobenzene U 5.0 1,1,1-Trichloroethane U 1.0 1,1,2-Trichloroethane U 1.0 1,1,2-Trichloroethane U 1.0 Trichloroethane U 1.0 1,2,3-Trichloropropane U 1.0 1,2,3-Trichloropropane U 1.0 1,2,4-Trimethythenzene U 1.0 1,2,4-Trimethythenzene U 1.0 Vinyl Chloride U 1.0 Vinyl Chloride U 1.0 Maps Aylene U 2.0 o-Xylene U 1.0 H-Bromofluoromethane(S) 106 80-120	2-Methylnaphthalene	U		5.0
n-Propybenzene U 1.0 Styrene U 1.0 1.1,1,2-Tetrachloroethane U 1.0 1,1,2-Tetrachloroethane U 1.0 Tetrachloroethene U 1.0 Toluene U 1.0 1,4-Trichloroethane U 1.0 1,1-Trichloroethane U 1.0 1,1-Z-Trichloroethane U 1.0 1,2-Trichloroethane U 1.0 1,2-Trichloroptopane U 1.0 1,2,3-Trichloroptopane U 1.0 1,2,3-Trimethylbenzene U 1.0 1,2,3-Trimethylbenzene U 1.0 1,2,4-Trimethylbenzene U 1.0 Viny Chloride U 1.0 Viny Chloride U 1.0 viyene U 2.0 o-Xylene U 1.0 4-Bromofluoromethane(S) 106 80-120		U		5.0
Styrene U 1.0 1,1,2-Tetrachloroethane U 1.0 1,1,2-Tetrachloroethane U 1.0 Etrachloroethane U 1.0 Toluene U 1.0 1,2,4-Trichloroethane U 5.0 1,1,1-Trichloroethane U 1.0 1,1,2-Trichloroethane U 1.0 1,1,2-Trichloroethane U 1.0 Trichlorofluoromethane U 1.0 1,2,3-Trinethylbenzene U 1.0 1,2,3-Trimethylbenzene U 1.0 1,3,5-Trimethylbenzene U 1.0 1,3,5-Trimethylbenzene U 1.0 Vinyl Chloride U 1.0 misp-Sylene U 2.0 o-Xylene U 1.0 4-Bromofluorobenzene(S) 100 80-120 Dibromofluoromethane(S) 106 80-120	Naphthalene	U		5.0
1,1,2-Tetrachloroethane U 1,0 1,1,2-Tetrachloroethane U 1,0 Tetrachloroethene U 1,0 Toluene U 1,0 1,2,4-Trichloroethane U 1,0 1,1,1-Trichloroethane U 1,0 1,1,2-Trichloroethane U 1,0 1,2-Trichloroethane U 1,0 Trichloroethane U 1,0 Trichloroethane U 1,0 1,2,3-Trichloropropane U 1,0 1,2,3-Trimethylbenzene U 1,0 1,3,5-Trimethylbenzene U 1,0 1,3,5-Trimethylbenzene U 1,0 Vinyl Chloride U 1,0 m&p-Xylene U 2,0 o-Xylene U 1,0 4-Bromofluorobenzene(S) 100 80-120	n-Propylbenzene	U		1.0
1,1,2,2-Tetrachloroethane U 1,0 Tetrachloroethene U 1,0 Toluene U 1,0 1,2,4-Trichlorobenzene U 5,0 1,1,1-Trichloroethane U 1,0 1,1,2-Trichloroethane U 1,0 Trichlorofluoromethane U 1,0 1,2,3-Trichloropropane U 1,0 1,2,3-Trimethylbenzene U 1,0 1,2,4-Trimethylbenzene U 1,0 1,3,5-Trimethylbenzene U 1,0 Vinyl Chloride U 1,0 m&p-Xylene U 2,0 e-Xylene U 1,0 4-Bromofiluorobenzene(S) 100 80-120 Dibromofiluoromethane(S) 106 80-120	Styrene	U		1.0
Tetrachloroethene U 1.0 Toluene U 1.0 1,2,4-Trichloroethane U 5.0 1,1,1-Trichloroethane U 1.0 1,1,2-Trichloroethane U 1.0 Trichloroethane U 1.0 Trichloropfluoromethane U 1.0 1,2,3-Trichloroppane U 1.0 1,2,3-Trimethylbenzene U 1.0 1,2,4-Trimethylbenzene U 1.0 1,3,5-Trimethylbenzene U 1.0 Vinyl Chloride U 1.0 Map-Xylene U 2.0 o-Xylene U 1.0 4-Bromofiluorobenzene(S) 100 80-120 Dibromofiluoromethane(S) 106 80-120	1,1,1,2-Tetrachloroethane	U		1.0
Toluene U 1.0 1,2,4-Trichlorobenzene U 5.0 1,1,1-Trichloroethane U 1.0 1,1,2-Trichloroethane U 1.0 Trichlorofluoromethane U 1.0 Trichlorofluoromethane U 1.0 1,2,3-Trichloropropane U 1.0 1,2,3-Trimethylbenzene U 1.0 1,2,4-Trimethylbenzene U 1.0 1,3,5-Trimethylbenzene U 1.0 Vinyl Chloride U 1.0 Winyl Chloride U 1.0 m&p-Xylene U 1.0 A-Bromofluorobenzene(S) 100 80-120 Dibromofluoromethane(S) 106 80-120	1,1,2,2-Tetrachloroethane	U		1.0
1,2,4-Trichloroehane U 5.0 1,1,1-Trichloroethane U 1.0 1,1,2-Trichloroethane U 1.0 Trichloroethane U 1.0 Trichloropromethane U 1.0 1,2,3-Trichloropropane U 1.0 1,2,3-Trimethylbenzene U 1.0 1,2,4-Trimethylbenzene U 1.0 1,3,5-Trimethylbenzene U 1.0 1,3,5-Trimethylbenzene U 1.0 1,3,5-Trimethylbenzene U 1.0 m&p-Xylene U 2.0 o-Xylene U 1.0 4-Bromofluorobenzene(S) 100 80-120 Dibromofluoromethane(S) 106 80-120	Tetrachloroethene	U		1.0
1,1,1-Trichloroethane U 1.0 1,1,2-Trichloroethane U 1.0 Trichloroethane U 1.0 Trichlorofluoromethane U 1.0 1,2,3-Trichloropropane U 1.0 1,2,3-Trimethylbenzene U 1.0 1,2,4-Trimethylbenzene U 1.0 1,3,5-Trimethylbenzene U 1.0 Vinyl Chloride U 1.0 m&p-Xylene U 2.0 o-Xylene U 1.0 4-Bromofluorobenzene(S) 100 80-120 Dibromofluoromethane(S) 106 80-120	Toluene	U		1.0
1,1,2-Trichloroethane U 1.0 Trichlorofluoromethane U 1.0 1,2,3-Trichloropropane U 1.0 1,2,3-Trimethylbenzene U 1.0 1,2,4-Trimethylbenzene U 1.0 1,3,5-Trimethylbenzene U 1.0 Vinyl Chloride U 1.0 Whyl Chloride U 1.0 m&p-Xylene U 2.0 o-Xylene U 1.0 4-Bromofluorobenzene(S) 100 80-120 Dibromofluoromethane(S) 106 80-120	1,2,4-Trichlorobenzene	U		5.0
Trichloroethene U 1.0 Trichlorofluoromethane U 1.0 1,2,3-Trichloropropane U 1.0 1,2,3-Trimethylbenzene U 1.0 1,2,4-Trimethylbenzene U 1.0 1,3,5-Trimethylbenzene U 1.0 Vinyl Chloride U 1.0 w8p-Xylene U 2.0 o-Xylene U 1.0 4-Bromofluorobenzene(S) 100 80-120 Dibromofluoromethane(S) 106 80-120	1,1,1-Trichloroethane	U		1.0
Trichlorofluoromethane U 1.0 1,2,3-Trichloropropane U 1.0 1,2,3-Trimethylbenzene U 1.0 1,2,4-Trimethylbenzene U 1.0 1,3,5-Trimethylbenzene U 1.0 Vinyl Chloride U 1.0 m&p-Xylene U 2.0 o-Xylene U 1.0 4-Bromofluorobenzene(S) 100 80-120 Dibromofluoromethane(S) 106 80-120	1,1,2-Trichloroethane	U		1.0
1,2,3-Trichloropropane U 1.0 1,2,3-Trimethylbenzene U 1.0 1,2,4-Trimethylbenzene U 1.0 1,3,5-Trimethylbenzene U 1.0 Vinyl Chloride U 1.0 m&p-Xylene U 2.0 o-Xylene U 1.0 4-Bromofluorobenzene(S) 100 80-120 Dibromofluoromethane(S) 106 80-120	Trichloroethene	U		1.0
1,2,3-Trimethylbenzene U 1.0 1,2,4-Trimethylbenzene U 1.0 1,3,5-Trimethylbenzene U 1.0 Vinyl Chloride U 1.0 m&p-Xylene U 2.0 o-Xylene U 1.0 4-Bromofluorobenzene(S) 100 80-120 Dibromofluoromethane(S) 106 80-120	Trichlorofluoromethane	U		1.0
1,2,4-Trimethylbenzene U 1.0 1,3,5-Trimethylbenzene U 1.0 Vinyl Chloride U 1.0 m&p-Xylene U 2.0 o-Xylene U 1.0 4-Bromofluorobenzene(S) 100 80-120 Dibromofluoromethane(S) 106 80-120	1,2,3-Trichloropropane	U		1.0
1,3,5-Trimethylbenzene U 1.0 Vinyl Chloride U 1.0 m&p-Xylene U 2.0 o-Xylene U 1.0 4-Bromofluorobenzene(S) 100 80-120 Dibromofluoromethane(S) 106 80-120	1,2,3-Trimethylbenzene	U		1.0
Vinyl Chloride U 1.0 m&p-Xylene U 2.0 o-Xylene U 1.0 4-Bromofluorobenzene(S) 100 80-120 Dibromofluoromethane(S) 106 80-120	1,2,4-Trimethylbenzene	U		1.0
m&p-Xylene U 2.0 o-Xylene U 1.0 4-Bromofluorobenzene(S) 100 80-120 Dibromofluoromethane(S) 106 80-120	1,3,5-Trimethylbenzene	U		1.0
o-Xylene U 1.0 4-Bromofluorobenzene(S) 100 80-120 Dibromofluoromethane(S) 106 80-120	Vinyl Chloride	U		1.0
4-Bromofluorobenzene(S) 100 80-120 Dibromofluoromethane(S) 106 80-120	m&p-Xylene	U		2.0
Dibromofluoromethane(S) 106 80-120	o-Xylene	U		1.0
	4-Bromofluorobenzene(S)	100		80-120
	Dibromofluoromethane(S)	106		80-120
1,2-Dichloroethane-d4(S) 101 80-120	1,2-Dichloroethane-d4(S)	101		80-120
Toluene-d8(S) 102 80-120		102		80-120

1914 Holloway Drive 11766 E Grand River 8660 S Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368



Order ID: A10763 Page: 3 of 5 Date: 09/13/22

VM22I09A: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VM22I09A.LCS: 09/09/2022 09:54			·=	=								
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Am				Qualifier	•	ount Result	Rec.	Qualifier			Qualifier
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
Acetone	50.0	24.9	50	40-130		50.0	26.4	53		6	20	
Acrylonitrile	50.0	50.4	101	70-130		50.0	52.8	106		5	20	
Benzene	50.0	49.4	99	80-120		50.0	47.9	96		3	20	
Bromobenzene	50.0	45.4	91	75-125		50.0	44.7	89		2	20	
Bromochloromethane	50.0	51.8	104	70-130		50.0	52.4	105		1	20	
Bromodichloromethane	50.0	50.8	102	75-120		50.0	50.5	101		1	20	
Bromomethane	50.0	51.0	102	68-135		50.0	49.4	99		3	20	
2-Butanone	50.0	35.1	70	40-129		50.0	37.3	75		7	20	
n-Butylbenzene	50.0	49.9	100	70-133		50.0	47.6	95		5	20	
sec-Butylbenzene	50.0	48.6	97	70-125		50.0	46.6	93		4	20	
ert-Butylbenzene	50.0	47.9	96	70-130		50.0	46.1	92		4	20	
Carbon Disulfide	50.0	56.7	113	70-130		50.0	55.1	110		3	20	
Carbon Tetrachloride	50.0	50.0	100	70-130		50.0	48.8	98		2	20	
Chlorobenzene	50.0	50.0	100	80-120		50.0	48.7	97		3	20	
Chloroethane	50.0	51.1	102	61-130		50.0	49.6	99		3	20	
Chloroform	50.0	50.5	101	80-120		50.0	50.1	100		1	20	
Chloromethane	50.0	54.8	110	67-125		50.0	54.1	108		2	20	
2-Chlorotoluene	50.0	47.6	95	75-125		50.0	46.1	92		3	20	
1,2-Dibromo-3-chloropropane (SIM)	50.0	43.4	87	70-130		50.0	44.9	90		3	20	
Dibromochloromethane	50.0	50.1	100	70-130		50.0	50.2	100		0	20	
Dibromomethane	50.0	47.7	95	75-125		50.0	47.9	96		1	20	
1,2-Dichlorobenzene	50.0	48.8	98	70-120		50.0	48.5	97		1	20	
1,3-Dichlorobenzene	50.0	49.2	98	75-125		50.0	48.0	96		2	20	
,4-Dichlorobenzene	50.0	48.7	97	75-125		50.0	47.7	95		2	20	
Dichlorodifluoromethane	50.0	58.4	117	70-136		50.0	56.9	114		3	20	
I,1-Dichloroethane	50.0	51.6	103	70-130		50.0	51.2	102		1	20	
1,2-Dichloroethane	50.0	47.4	95	70-130		50.0	47.7	95		0	20	
,1-Dichloroethene	50.0	47.3	95	78-120		50.0	50.2	100		5	20	
sis-1,2-Dichloroethene	50.0	51.9	104	70-125		50.0	51.4	103		1	20	
rans-1,2-Dichloroethene	50.0	52.2	104	70-130		50.0	51.1	102		2	20	
,2-Dichloropropane	50.0	51.7	103	80-121		50.0	50.6	101		2	20	
cis-1,3-Dichloropropene	50.0	51.9	104	70-130		50.0	51.6	103		1	20	
trans-1,3-Dichloropropene	50.0	53.3	107	70-132		50.0	53.2	106		1	20	

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Order ID: A10763
Page: 4 of 5
Date: 09/13/22

VM22I09A: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VM22I09A.LCS: 09/09/2022 09:	54 [VM22I09A] VM22I0	9A.LCSD: 09/09/2	022 10:22 [VM2	22I09A]								
	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Amo	ount			Qualifier	Spike Amoun	t Result	Rec.	Qualifier			Qualifier
Analyte	μg/L	μg/L	%	%		μg/L	μg/L	%		%	%	
Ethylbenzene	50.0	49.1	98	80-120		50.0	47.8	96		2	20	
Ethylene Dibromide	50.0	44.6	89	80-120		50.0	45.2	90		1	20	
2-Hexanone	50.0	36.5	73	70-130		50.0	38.5	77		5	20	
Isopropylbenzene	50.0	49.1	98	75-125		50.0	47.9	96		2	20	
4-Methyl-2-pentanone	50.0	52.0	104	70-130		50.0	54.4	109		5	20	
Methylene Chloride	50.0	51.3	103	70-130		50.0	51.5	103		0	20	
2-Methylnaphthalene	50.0	43.7	87	70-130		50.0	43.3	87		0	20	
MTBE	50.0	55.6	111	70-125		50.0	57.4	115		4	20	
Naphthalene	50.0	46.1	92	70-130		50.0	46.8	94		2	20	
n-Propylbenzene	50.0	49.4	99	70-130		50.0	47.7	95		4	20	
Styrene	50.0	48.5	97	70-130		50.0	47.2	94		3	20	
1,1,1,2-Tetrachloroethane	50.0	50.7	101	80-130		50.0	49.5	99		2	20	
1,1,2,2-Tetrachloroethane	50.0	53.1	106	70-130		50.0	53.8	108		2	20	
Tetrachloroethene	50.0	50.3	101	70-130		50.0	48.2	96		5	20	
Toluene	50.0	50.2	100	80-120		50.0	48.7	97		3	20	
1,2,4-Trichlorobenzene	50.0	48.5	97	70-130		50.0	48.0	96		1	20	
1,1,1-Trichloroethane	50.0	52.1	104	70-130		50.0	51.1	102		2	20	
1,1,2-Trichloroethane	50.0	48.7	97	75-125		50.0	48.9	98		1	20	
Trichloroethene	50.0	45.9	92	71-125		50.0	44.3	89		3	20	
Trichlorofluoromethane	50.0	54.7	109	70-133		50.0	53.6	107		2	20	
1,2,3-Trichloropropane	50.0	46.0	92	75-125		50.0	47.7	95		3	20	
1,2,3-Trimethylbenzene	50.0	48.3	97	70-130		50.0	46.5	93		4	20	
1,2,4-Trimethylbenzene	50.0	51.2	102	75-130		50.0	49.5	99		3	20	
1,3,5-Trimethylbenzene	50.0	48.7	97	75-130		50.0	47.4	95		2	20	
Vinyl Chloride	50.0	51.7	103	74-125		50.0	50.5	101		2	20	
m&p-Xylene	100	99.2	99	75-130		100	95.8	96		3	20	
o-Xylene	50.0	47.6	95	80-120		50.0	46.6	93		2	20	
4-Bromofluorobenzene(S)			99	80-120				101				
Dibromofluoromethane(S)			103	80-120				107				
1,2-Dichloroethane-d4(S)			98	80-120				101				
Toluene-d8(S)			100	80-120				101				

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Order ID: A10763 Page: 5 of 5 Date: 09/13/22

Definitions/ Qualifiers:

- U: The analyte was not detected at or above the Reporting Limit (RL).
- *: Value reported is outside QC limits

Exception Summary:

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

Report Generated By:

By Bailey Welch at 5:08 PM, Sep 13, 2022

Fibertec environmental services

Analytical Laboratory

1914 Holloway Drive Holf, MI 48842

Phone: 517 699 0345 Fax: 517 699 0388

emall: lab@fibertec.us

8660 S. Mackinaw Trail Cadillac, MI 49601

Phone: 231 775 8368 Fax: 231 775 8584

Geoprobe

11766 E. Grand River Rd.

Brighton, MI 48116

Phone: 810 220 3300 Fax: 810 220 3311

Chain of Custody # 212794 PAGE __ of __

Client Name	· Loro	radi	5						ARAME	TERS			Matrix Code Deliverables
Contact Pe	son: St	aceu	Hannola										s Soil Gw Ground Water Level 2
Dunia ak Nissa	/	- 1				Ш							A Air Sw Surface Water Level 3
30	13611	2 -	TRW Milford	(CODE)		N						PE	O Oil ww Waste Water Level 4
Email distrib	ution list: 😽	tacey	hannula@arcadis.com ncinnis@arcadis.com	MATRIX (see right corner for	,,	500						HOLD SAMPLE	P Wipe X Other: Specify EDD
		ohn in	ncinnis@arcadis.com	H COR	NER.	0						OLD	
Quote#				SEE RIG	# OF CONTAINERS	80						-	
Purchase O	rder# 2	10136	112	TRIX	Ä	SB							
Date	Time	Sample #	Client Sample Descriptor	_	_	\vdash				_			Remarks:
9-8-22	0920		OW-16D2-090822	GW	_	X							rush TAT
9.8.22	1007		OW-16D2R1-090822	GW	3	X							rush TAT
9.8.22	1055		OW-16D2R2-090822	CM	3	X							rush TAT Received
			TRIPBLANK		3	X							Std TAT OK On Ice
9.8.22	1040		FIELDBLANK-090822		3	×							SAD TAT OK
						П							
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1 b	us. day	<u></u>	bus. days3 bus. days		4 k	ous. d	days	6	1		Fiberte	c pro	oject number: A 10763
5-71	ous. days (sta	ındard)	Other (specify time/date requirement):			_					Tempe	eratur	re upon receipt at Lab: 4.4°C
			Please		e bo	ack	for	terms an	d con	dition	S.		



Tuesday, October 4, 2022

Fibertec Project Number: A11227 Amended

Project Identification: TRW Milford (30136112) /30136112

Submittal Date: 10/03/2022

Ms. Stacey Hannula Arcadis U.S., Inc. - Novi 28550 Cabot Drive Suite 500 Novi, MI 48377

Dear Ms. Hannula,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

Analytical report amended due to a data upload error for sample A11227-001 (OW-16D2_100322). This report replaces the original report created 10/4/22 @ 3: 52 PM.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

By Katherine Jones at 5:01 PM, Oct 04, 2022

For Daryl P. Strandbergh Laboratory Director

Enclosures



Order: Date:

09:32

Matrix: Ground Water

A11227 10/04/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2_100322 Chain of Custody: 205827

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 10/03/22

Aliquot ID:

A11227-001

Client Project No: 30136112 Sample Matrix: Ground Water Collect Time:

Sample Comments:

Volatile Organic Compounds (VOCs) by GC/MS

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

volatile Organic Compounds (VOCs) by GC	/IVIS			-	uot iD:	A11227-001	Maurix.	oround water		
Method: EPA 5030C/EPA 8260D				Des	cription:	OW-16D2_100322				
						Prepara			alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U		μg/L	50	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
3. Benzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
4. Bromobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
5. Bromochloromethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
6. Bromodichloromethane	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
‡ 7. Bromoform (SIM)	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
8. Bromomethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
9.2-Butanone	U		μg/L	25	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
10. n-Butylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
11. sec-Butylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
12. tert-Butylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
13. Carbon Disulfide	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
14. Carbon Tetrachloride	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
15. Chlorobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
16. Chloroethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	KYD
17. Chloroform	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
18. Chloromethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
19.2-Chlorotoluene	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
21. Dibromochloromethane	U	V+	μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
22. Dibromomethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
27. 1,1-Dichloroethane	3.2		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
28. 1,2-Dichloroethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
29. 1,1-Dichloroethene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
30. cis-1,2-Dichloroethene	17		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
31. trans-1,2-Dichloroethene	1.4		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
32. 1,2-Dichloropropane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
35. Ethylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
36. Ethylene Dibromide	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
37.2-Hexanone	U		μg/L	50	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART

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F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584

Page:



Order: A11227 Date:

10/04/22

205827

OW-16D2_100322 Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Chain of Custody:

TRW Milford (30136112) 10/03/22 Client Project Name: Sample No: Collect Date:

30136112 Client Project No: Sample Matrix: **Ground Water** Collect Time: 09:32

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by O Method: EPA 5030C/EPA 8260D	GC/MS			•	uot ID: cription:	A11227-001 OW-16D2_100322	Matrix:	Ground Water		
						Prepara	tion	An	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
38. Isopropylbenzene	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
39. 4-Methyl-2-pentanone	U		μg/L	50	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
40. Methylene Chloride	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
‡ 41.2-Methylnaphthalene	U	V+ L+	μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
42. MTBE	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
43. Naphthalene	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
44. n-Propylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
45. Styrene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
46. 1,1,1,2-Tetrachloroethane	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
47.1,1,2,2-Tetrachloroethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
48. Tetrachloroethene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
49. Toluene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
50. 1,2,4-Trichlorobenzene	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
51.1,1,1-Trichloroethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
‡ 52.1,1,2-Trichloroethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
53. Trichloroethene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
54. Trichlorofluoromethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
55. 1,2,3-Trichloropropane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
‡ 56. 1,2,3-Trimethylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
57. 1,2,4-Trimethylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
58. 1,3,5-Trimethylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
59. Vinyl Chloride	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
60. m&p-Xylene	U		μg/L	2.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
61. o-Xylene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART
‡ 62. Xylenes	U		μg/L	3.0	1.0	10/03/22	VB22J03A	10/03/22 18:14	VB22J03A	ART

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Order: /

A11227 10/04/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2R1_100322 Chain of Custody: 205827

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 10/03/22

Client Project No: 30136112 Sample Matrix: Ground Water Collect Time: 10:18

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/	MS			Aliq	uot ID:	A11227-002 Matrix:		Ground Water		
Method: EPA 5030C/EPA 8260D				Des	cription:	OW-16D2R1_100	322			
						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U		μg/L	50	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
3. Benzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
4. Bromobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
5. Bromochloromethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
6. Bromodichloromethane	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
‡ 7. Bromoform (SIM)	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
8. Bromomethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
9. 2-Butanone	U		μg/L	25	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
10. n-Butylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
11. sec-Butylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
12. tert-Butylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
13. Carbon Disulfide	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
14. Carbon Tetrachloride	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
15. Chlorobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
16. Chloroethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
17. Chloroform	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
18. Chloromethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
19. 2-Chlorotoluene	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
21. Dibromochloromethane	U	V+	μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
22. Dibromomethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
24.1,3-Dichlorobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
27.1,1-Dichloroethane	2.1		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
28.1,2-Dichloroethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
29. 1,1-Dichloroethene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
30. cis-1,2-Dichloroethene	19		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
31. trans-1,2-Dichloroethene	1.1		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
35. Ethylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
36. Ethylene Dibromide	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
37.2-Hexanone	U		μg/L	50	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART

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Order: Date: A11227 10/04/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2R1_100322 Chain of Custody: 205827

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 10/03/22

Client Project No: 30136112 Sample Matrix: Ground Water Collect Time: 10:18

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS			Aliq	uot ID:	A11227-002 Matrix:		Ground Water			
Method: EPA 5030C/EPA 8260D				Des	cription:	OW-16D2R1_100	322			
						Prepai	ation	Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
38. Isopropylbenzene	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
39. 4-Methyl-2-pentanone	U		μg/L	50	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
40. Methylene Chloride	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
‡ 41.2-Methylnaphthalene	U	V+ L+	μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
42. MTBE	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
43. Naphthalene	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
44. n-Propylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
45. Styrene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
46. 1,1,1,2-Tetrachloroethane	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
47.1,1,2,2-Tetrachloroethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
48. Tetrachloroethene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
49. Toluene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
50. 1,2,4-Trichlorobenzene	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
51.1,1,1-Trichloroethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
‡ 52.1,1,2-Trichloroethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
53. Trichloroethene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
54. Trichlorofluoromethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
55. 1,2,3-Trichloropropane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
‡ 56. 1,2,3-Trimethylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
57. 1,2,4-Trimethylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
58. 1,3,5-Trimethylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
59. Vinyl Chloride	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
60. m&p-Xylene	U		μg/L	2.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
61. o-Xylene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART
‡ 62. Xylenes	U		μg/L	3.0	1.0	10/03/22	VB22J03A	10/03/22 18:39	VB22J03A	ART



Order: Date:

Matrix: Ground Water

A11227 10/04/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2R2_100322 Chain of Custody: 205827

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 10/03/22

Aliquot ID:

A11227-003

Client Project No: 30136112 Sample Matrix: Ground Water Collect Time: 11:07

Sample Comments:

Volatile Organic Compounds (VOCs) by GC/MS

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

volatile Organic Compounds (VOCs) by GC/MS				-	uot iD:			oround water		
Method: EPA 5030C/EPA 8260D				Des	cription:	OW-16D2R2_100	322			
5 ()	5 "	_		.	5	Prepar			alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U		μg/L	50	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
3. Benzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
4. Bromobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
5. Bromochloromethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
6. Bromodichloromethane	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
‡ 7. Bromoform (SIM)	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
8. Bromomethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
9. 2-Butanone	U		μg/L	25	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
10. n-Butylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
11. sec-Butylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
12. tert-Butylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
13. Carbon Disulfide	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
14. Carbon Tetrachloride	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
15. Chlorobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
16. Chloroethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
17. Chloroform	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
18. Chloromethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
19. 2-Chlorotoluene	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
21. Dibromochloromethane	U	V+	μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
22. Dibromomethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
27. 1,1-Dichloroethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
28. 1,2-Dichloroethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
29. 1,1-Dichloroethene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
30. cis-1,2-Dichloroethene	10		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
32. 1,2-Dichloropropane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
35. Ethylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
36. Ethylene Dibromide	U		μg/L	1.0	1.0	10/03/22		10/03/22 19:04		
37.2-Hexanone	U		μg/L	50	1.0	10/03/22		10/03/22 19:04		
37.2-nexamone	U		µg/L	50	1.0	10/03/22	VDZZJUSA	10/03/22 19.04	VDZZJUJA	AR

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Order: Date:

A11227 10/04/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: OW-16D2R2_100322 Chain of Custody: 205827

10/03/22 Client Project Name: TRW Milford (30136112) Collect Date: Sample No:

Client Project No: 30136112 Sample Matrix: **Ground Water** Collect Time: 11:07

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS					uot ID:	A11227-003				
Method: EPA 5030C/EPA 8260D				Des	cription:	OW-16D2R2_100	0322			
						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init
38. Isopropylbenzene	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	AR1
39. 4-Methyl-2-pentanone	U		μg/L	50	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	AR
40. Methylene Chloride	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	AR1
‡ 41.2-Methylnaphthalene	U	V+ L+	μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
42. MTBE	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	AR
43. Naphthalene	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	AR1
44. n-Propylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	AR1
45. Styrene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	AR1
46.1,1,1,2-Tetrachloroethane	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	AR1
47.1,1,2,2-Tetrachloroethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
48. Tetrachloroethene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
49. Toluene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
50. 1,2,4-Trichlorobenzene	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
51.1,1,1-Trichloroethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
‡ 52.1,1,2-Trichloroethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
53. Trichloroethene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
54. Trichlorofluoromethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	AR1
55. 1,2,3-Trichloropropane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART
‡ 56. 1,2,3-Trimethylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	AR1
57. 1,2,4-Trimethylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	AR1
58. 1,3,5-Trimethylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	AR1
59. Vinyl Chloride	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	AR1
60. m&p-Xylene	U		μg/L	2.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	AR1
61. o-Xylene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	AR1
‡ 62. Xylenes	U		μg/L	3.0	1.0	10/03/22	VB22J03A	10/03/22 19:04	VB22J03A	ART



Order:

A11227 10/04/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Fieldblank_100322 Chain of Custody: 205827

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 10/03/22

Client Project No: 30136112 Sample Matrix: Blank: Field Collect Time: 13:00

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC	/MS			Aliq	uot ID:	A11227-004	Matrix: I	Blank: Field		
Method: EPA 5030C/EPA 8260D				Des	cription:	Fieldblank_10032	2			
						Prepara	ition	Ana	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U		μg/L	50	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
3. Benzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
4. Bromobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
5. Bromochloromethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
6. Bromodichloromethane	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
‡ 7. Bromoform (SIM)	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
8. Bromomethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
9.2-Butanone	U		μg/L	25	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
10. n-Butylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
11. sec-Butylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
12. tert-Butylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
13. Carbon Disulfide	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
14. Carbon Tetrachloride	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
15. Chlorobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
16. Chloroethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
17. Chloroform	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
18. Chloromethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
19.2-Chlorotoluene	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
21. Dibromochloromethane	U	V+	μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
22. Dibromomethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
27.1,1-Dichloroethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
28. 1,2-Dichloroethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
29. 1,1-Dichloroethene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
31.trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
32. 1,2-Dichloropropane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
35. Ethylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
36. Ethylene Dibromide	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
37.2-Hexanone	U		μg/L	50	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART

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Page:



Order: Date:

A11227 10/04/22

205827 Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Fieldblank_100322 Chain of Custody:

TRW Milford (30136112) 10/03/22 Client Project Name: Collect Date: Sample No:

Client Project No: 30136112 Sample Matrix: Blank: Field Collect Time: 13:00

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by Method: EPA 5030C/EPA 8260D	GC/MS			•	uot ID:	A11227-004 Fieldblank_10032		Blank: Field		
Wethou. EFA 30300/EFA 02000				Des	cription.			Δ	- h i -	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prepar P. Date	P. Batch	A. Date	alysis A. Batch	Init.
38. Isopropylbenzene	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
39. 4-Methyl-2-pentanone	U		μg/L	50	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
40. Methylene Chloride	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
‡ 41.2-Methylnaphthalene	U	V+ L+	μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
42. MTBE	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
43. Naphthalene	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
44. n-Propylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
45. Styrene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
46. 1,1,1,2-Tetrachloroethane	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
47.1,1,2,2-Tetrachloroethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
48. Tetrachloroethene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
49. Toluene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
50. 1,2,4-Trichlorobenzene	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
51.1,1,1-Trichloroethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
‡ 52.1,1,2-Trichloroethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
53. Trichloroethene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
54. Trichlorofluoromethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
55. 1,2,3-Trichloropropane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
‡ 56.1,2,3-Trimethylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
57. 1,2,4-Trimethylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
58. 1,3,5-Trimethylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
59. Vinyl Chloride	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
60. m&p-Xylene	U		μg/L	2.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
61. o-Xylene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART
‡ 62. Xylenes	U		μg/L	3.0	1.0	10/03/22	VB22J03A	10/03/22 17:25	VB22J03A	ART

Page:



Order: Date: A11227 10/04/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Trip Blank Chain of Custody: 205827

Client Project Name: TRW Milford (30136112) Sample No: Collect Date: 10/03/22

Client Project No: 30136112 Sample Matrix: Blank: Trip Collect Time: NA

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC Method: EPA 5030C/EPA 8260D	/MS			-	uot ID: cription:	A11227-005 Trip Blank	Matrix: I	Blank: Trip		
						Prepa	ration	An	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U		μg/L	50	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR1
‡ 2. Acrylonitrile	U		μg/L	2.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR1
3. Benzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
4. Bromobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
5. Bromochloromethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
6. Bromodichloromethane	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
‡ 7. Bromoform (SIM)	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
8. Bromomethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
9.2-Butanone	U		μg/L	25	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
10. n-Butylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
11. sec-Butylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
12. tert-Butylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
13. Carbon Disulfide	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
14. Carbon Tetrachloride	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
15. Chlorobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
16. Chloroethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
17. Chloroform	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
18. Chloromethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
19.2-Chlorotoluene	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
‡ 20.1,2-Dibromo-3-chloropropane (SIM)	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
21. Dibromochloromethane	U	V+	μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
22. Dibromomethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
23. 1,2-Dichlorobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
24. 1,3-Dichlorobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
25. 1,4-Dichlorobenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
26. Dichlorodifluoromethane	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
27. 1,1-Dichloroethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
28. 1,2-Dichloroethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
29. 1,1-Dichloroethene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
30. cis-1,2-Dichloroethene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
31. trans-1,2-Dichloroethene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
32.1,2-Dichloropropane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
33. cis-1,3-Dichloropropene	U		μg/L	0.50	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
34. trans-1,3-Dichloropropene	U		μg/L	0.50	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
35. Ethylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
36. Ethylene Dibromide	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR
37.2-Hexanone	U		μg/L	50	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	AR ²

lab@fibertec.us

1914 Holloway Drive 11766 E. Grand River 8660 S. Mackinaw Trail Holt, MI 48842 Brighton, MI 48116 Cadillac, MI 49601 T: (517) 699-0345 T: (810) 220-3300 T: (231) 775-8368 F: (517) 699-0388 F: (810) 220-3311 F: (231) 775-8584

Page:



Blank: Trip

Order: /

A11227 10/04/22

Client Identification: Arcadis U.S., Inc. - Novi Sample Description: Trip Blank

Chain of Custody: 205827

10/03/22

Client Project Name: TRW Milford (30136112) Sample No:

30136112

Collect Date:
Collect Time:

NA

Sample Comments:

Client Project No:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Sample Matrix:

Volatile Organic Compounds (VOCs) by Method: EPA 5030C/EPA 8260D	GC/MS			•		A11227-005 Trip Blank	Matrix: I	Blank: Trip		
						Prepa	ration	An	alysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
38. Isopropylbenzene	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
39. 4-Methyl-2-pentanone	U		μg/L	50	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
40. Methylene Chloride	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
‡ 41.2-Methylnaphthalene	U	V+ L+	μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
42. MTBE	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
43. Naphthalene	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
44. n-Propylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
45. Styrene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
46. 1,1,1,2-Tetrachloroethane	U	V+	μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
47.1,1,2,2-Tetrachloroethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
48. Tetrachloroethene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
49. Toluene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
50. 1,2,4-Trichlorobenzene	U		μg/L	5.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
51.1,1,1-Trichloroethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
‡ 52.1,1,2-Trichloroethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
53. Trichloroethene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
54. Trichlorofluoromethane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
55. 1,2,3-Trichloropropane	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
‡ 56.1,2,3-Trimethylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
57. 1,2,4-Trimethylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
58. 1,3,5-Trimethylbenzene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
59. Vinyl Chloride	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
60. m&p-Xylene	U		μg/L	2.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
61. o-Xylene	U		μg/L	1.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART
‡ 62. Xylenes	U		μg/L	3.0	1.0	10/03/22	VB22J03A	10/03/22 17:49	VB22J03A	ART



Analytical Laboratory Report Laboratory Project Number: A11227

Order: A11227 Date: 10/04/22

Definitions/ Qualifiers:

- **A:** Spike recovery or precision unusable due to dilution.
- **B:** The analyte was detected in the associated method blank.
- E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
- J: The concentration is an estimated value.
- M: Modified Method
- **U:** The analyte was not detected at or above the reporting limit.
- X: Matrix Interference has resulted in a raised reporting limit or distorted result.
- W: Results reported on a wet-weight basis.
- *: Value reported is outside QC limits

Exception Summary:

L+ : Recovery in the associated laboratory sample (LCS) exceeds the upper control limit. Results may be biased high.
 V+ : Recovery in the associated continuing calibration verification sample (CCV) exceeds the upper control limit. Results may be biased high.

Analysis Locations:

All analyses performed in Holt.



Accreditation Number(s):

T104704518-22-14 (TX)

Fibertec environmental services

Analytical Laboratory

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Fax: 810 220 3311

Chain of Custody # 205827 PAGE ___ of ___

Client Name: AVCadiS						PARAN	METERS			Matrix Code Deliverables
Contact Person: Stacy Hannula										S Soil Gw Ground Water X Level 2
Project Name/ Number:										A Air Sw Surface Water Level 3
30136112 TRW Milford	CODE)		2						빌	Www Waste Water Level 4
Email distribution list: Stacey. hannula@arcads.com john.mcinnis@arcads.com			0						SAME	P Wipe X Other: Specify EDD
john mainnis@arcadus.com	T COR	NERS	8260						HOLD SAMPLE	
Quote#	MATRIX (SEE RIGHT CORNER FOR	# OF CONTAINERS							=	
Purchase Order# 30136112	TRIX (ρ. Ο	700							
Date Time Sample # Client Sample Descriptor	Σ¥		1						1_	Remarks:
10/3/22 0932 OW-16D2_100322	GW	3	×							48 hr TAT
10/3/22 1018 OW-1602R1_100322	GW	3	×							48hr TAT
10/3/22 1107 OW-16D2R2-100322	GN	3	×							48hr TAT
10/3/22 1100 FIELDBLANK_100322	-	3	X							STATAT
- TRIPBLANK	-	3	×							STEL TAT
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Turnaround Time ALL RESULTS WILL BE SENT BY THE END OF					1 10 1	-1		T		LAB USE ONLY
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Please	see	bc	ick	for	terms an	d co	nditio	ns		

Attachment 16

Additional Technical Information (In Response to September 22, 2022 Email from EGLE)

ATTACHMENT 16

Response to EGLE's September 22, 2022 Email: Request for Additional Information Related to the Former Kelsey-Hayes Site, Milford, Technical Summary Report

1) EGLE Technical Comment/Request No. 1:

Monitoring well construction logs for OW-16D2, OW-16D2R1, and OW-16D2R2, including material and date of installation.

ZF Response:

The monitoring well construction logs are attached and include the materials of construction and date of installation. See Exhibit A.

2) EGLE Technical Comment/Recommendation No. 2:

An explanation of why fouling in OW-16D2 is occurring specifically there and not elsewhere and if we can possibly expect seeing future issues with this well, or other wells.

- In the presentation you had expressed this was the only stainless steel well in the network and other wells were PVC. Can you express if, how, or why this is notable? Does the well material, slot size, or other parameters play into tendencies for biological fouling?
- Discuss how biological testing completed two months after initial well redevelopment is important today. We had a good conversation about this yesterday, but I don't want to be recreating that perspective which you had shared.

ZF Response:

As indicated in the well log for Monitoring Well OW-16D2, the material of construction is galvanized steel (casing and screen). None of the other wells were constructed with galvanized steel well materials. Most wells have polyvinyl chloride (PVC) casings and screens except for the two new monitoring wells (OW-16D2R1 and OW-16D2R2) which have PVC casings and stainless-steel screens. Although PVC well screens are acceptable for monitoring wells, stainless steel screens were selected for the two new wells to provide optimal connectivity to the aquifer and long-term performance for monitoring and maintenance. In general, galvanized monitoring wells are not preferred because of their low resistance to chemical attack and corrosion, especially over the course of long-term monitoring programs.

During the initial redevelopment of OW-16D2 conducted on April 1, 2022, most of the water was removed from the well during the process and recovery of groundwater into the well was very slow, at a rate of less than 1 foot per hour. Because this initial surging did not significantly improve the hydraulic connection of the well to the aquifer (i.e., we still observed significant drawdown during low-flow sampling), the purpose of the chemical/biological testing was to assess biological and chemical factors (biofouling, scaling, etc.) for a complete well profile to help determine if there is

scaling and/or bioaccumulation on the well screen. Water Systems Engineering (WSE) performed the chemical/biological testing of two samples collected on June 6, 2022. A camera survey/video of OW-16D2 was also performed to further assess and verify the condition of the well.

As indicated in the WSE evaluation (see **Attachment 2**), there is significant potential for mineral scale buildup over time as indicated by the high concentration of dissolved minerals present including hardness, calcium, and alkalinity. This was confirmed in the well video as shown below:



OW-16D2 well screen

The bacterial assessment as well as the microscopic evaluation found strong evidence indicating that the well is heavily impacted by excessive bacterial growth, particularly by slime forming organisms.

In addition, as presented in the follow-up letter from Mr. Michael Schnieders (WSE), dated September 29, 2022 (See Exhibit B), it's believed there may be a breach in the well casing and/or degradation/failure of the grout based on the following:

- Oxidative oxidation reduction potential (ORP) of 160 and 179 millivolts (mV) observed in both the June 6, 2022 water samples evaluated by WSE in comparison to the aquifer conditions characterized by the ORP in OW-16D2R1 (-112 to -187 mV, June through September 2022) and OW-16D2R2 (-138 to -145 mV, August and September 2022). Please note: Based on the drawdown observed during the collection of the two June 6, 2022 samples evaluated by WSE (approximately 21 and 25 feet), both samples contain water primarily from within the well and are not indicative of aquifer conditions.
- The evidence of corrosion in the well video as shown below.



OW-16D2 joint where sections of the well casing are connected together

Initial recommendations provided by WSE to help restore unrestricted flow between the interior of the well and the aquifer include well rehabilitation involving mechanical brushing, an acid treatment to dissolve mineral scale followed by disinfection to reduce the bacterial load in the well. However, since the well is constructed with galvanized steel and there are already signs of corrosion and deterioration (observed in the well video), there is a good chance the well would fail during the rehabilitation process or again after rehabilitation. Furthermore, the use of chemicals in a well near the Village of Milford's drinking water wells has been strongly discouraged/denied by EGLE. As indicated above, no other wells in ZF's monitoring network are constructed with galvanized steel materials. The material of construction of most of the other ZF monitoring wells are PVC with no significant drawdown observed during sampling and are therefore believed to be properly functioning.

Because there are now two new properly constructed and performing monitoring wells (OW-16D2R1 and OW-16D2R2) installed adjacent to OW-16D2, and for the reasons discussed above, OW-16D2 is no longer needed and should be abandoned.

3) EGLE Technical Comment/Recommendation No. 3:

Demonstration or proof of why the cis-1,2-DCE (DCE) seen in monitoring OW-16-series will not break down into VC under natural conditions present at the facility.

- A map of DCE concentrations or possibly appending DCE concentrations onto the Figure 1 Site Layout. This could be shown as where DCE is present above criteria, and where it's present below criteria.
- May be helpful to show trend graphs for OW-16D2 and any other nearby wells as was shown for upgradient wells.

ZF Response:

There has been over 25 years of data collected from the off-site monitoring wells in ZF's well network with no detections of vinyl chloride, including the two new properly constructed and performing wells (OW-16D2R1 and OW-16D2R2 located next to OW-16D2. The only exception was the emergence of vinyl chloride between May 2021 and March 2022, and only in OW-16D2 which was determined to be a compromised well and not indicative of actual aquifer conditions, as discussed in the previous correspondence with EGLE. This abundance of data demonstrates that cis-1,2-dichloroethene (cis-1,2-DCE) is stable below drinking water criteria in the aquifer and conditions of the aquifer are not conducive for degradation of this compound to vinyl chloride. In addition, the aquifer is highly prolific with estimated linear groundwater velocities ranging from 1.4 feet per day (downgradient of the former Kelsey-Hayes Site) to 76 feet/day (near the Village of Milford drinking water wells) which provides high pore-water exchange in the aquifer and is therefore not conducive for further degradation to vinyl chloride, as evidenced by over 25 years of monitoring data.

Regarding the comment about vinyl chloride exceedances in OW-16D2 being intermittent, there are temporal variabilities, along with sampling and analytical method variabilities and other factors that result in variability of reported concentrations especially at the part-per-billion level. The reported "exceedances" ranged from 2.3 to 3.5 ug/L vinyl chloride or 1.2 ug/L variance relative to a reporting limit of 1.0 ug/L. However, as the well was determined to be compromised, and low-flow (minimal

drawdown) purging could not be sustained, the analytical results produced from the well in the compromised condition are not suitable for comparison to EGLE Part 201 criteria. More important than the variability of the vinyl chloride concentrations produced from the malfunctioning monitoring well is the fact that since the stagnant water was removed from OW-16D2 during redevelopment, no vinyl chloride detections have been reported during the following 7-month period which has included 20 total samples to date.

Figure 1 Site Layout from the Technical Summary report contains concentrations of cis-1,2-DCE. Cis-1,2-DCE is not above the drinking water criterion (70 ug/L) in any of the wells. The Figure has been updated to show the locations of Monitoring Well OW-16D2R2 and the vertical aquifer profile borings.

Because OW-16D2 has been determined to be a malfunctioning monitoring well and not representative of actual aquifer conditions, Arcadis does not believe that a trend graph of OW-16D2 analytical results is appropriate for evaluation of site conditions. Trend graphs of Observation Wells within and directly downgradient of the Site-related groundwater impacts were presented in the Technical Summary Report (see Attachment 1) and show the following:

- 1. No detections of vinyl chloride
- 2. cis-1,2-DCE concentrations stable and far below the drinking water criterion
- 3. decreasing trichloroethene (TCE) concentrations, the presumed parent chlorinated volatile organic compound (CVOC) for dichlorination daughter products such as cis-1,2-DCE

The Village of Milford's Monitoring Well (MW-03-94) is the closest upgradient well to OW-16D2. A trend graph of this well was received from the Village of Milford's consultant, John Wood Group PLC (Wood). This graph shows no detections of vinyl chloride and decreasing concentrations of cis-1,2-DCE. We have not included the trend graph in this submittal because Arcadis was not given permission from Wood to reproduce the data; however, these data may be requested and reviewed by EGLE if desired.

While the OW-09 series wells are located outside of the modeled flow-path of groundwater from the former Kelsey-Hayes Site, and in the in proximity to other known sources of CVOC contamination and downgradient of the Former Spiral Industries CVOC release site, a review of concentrations from these wells (Exhibit C) similarly shows the following:

- 1. No detections of vinyl chloride
- 2. cis-1,2-DCE concentrations stable and far (order of magnitude) below the drinking water criterion
- 3. decreasing and non-detect TCE concentrations

A review of the concentrations from the OW-18 series of wells (Exhibit C) shows the following:

- 1. No detections of vinyl chloride or TCE
- 2. cis-1,2-DCE concentrations stable and far below the drinking water criterion

Collectively these data further reinforce the already sound conclusion that there is no imminent and substantial endangerment to the public water supply due to vinyl chloride.

Exhibit A

Monitoring Well Construction Logs

ARG	CADI	S for nativ	Chronillimuty palaret					Boring No.:_	VAP-01/OW-16D2	R1_
Soil B				v 11ava - 8495 - 1			Data Otanta II. 05/40/0000			6
Project No				y-Hayes-Milford			Date Started: <u>05/16/2022</u> tte Completed: <u>05/20/2022</u>	Logger: <u>Chri</u>		
Project Lo								onditions: 70 F		
Depth (feet)	Sample Interval	Blow	Recovery (in.)	Sample ID	PID (ppm)	USCS Class	Description		Construction Details	Well
1 1 2 3 4 5			60	НА			FILL; Hand Auger to 5 feet.		(0.0-85.0' bgs) 2"	
6 7 8 9			13	SD	0.0		FILL; silt and sand; roots; metal; glass; bl. dark gray. NOTE: odor.	ack and gray to	PVC Well Casing	
10 11 12 13 14			53	SD	0.0 0.0 0.0		FILL; silt and sand; dark gray. SAND, very fine to fine; little medium sar sorted; wet; gray. SAND, fine to medium; some coarse sant little granule; little small pebble; trace la subrounded; well sorted; wet; gray. SAND, very fine to medium, subrounded	d, subrounded; rge pebble,	(1.0-80.0' bgs) Bentonite	
15 16 17 17 18 19 20			50	VAP-01-01_15_20	0.0		gray. SAND, very fine to medium, subrounded large pebbles; subrounded; wet; gray. SAND, very fine to medium, subrounded gray.	,		
21 22 23 24			46	SD	0.0 0.0 0.0		SAND, very fine to medium, subrounded large pebbles, subrounded; well sorted; SAND, very fine to coarse, subrounded; little small pebble; trace sm subrounded; poorly sorted; wet; gray. SAND, very fine to medium, subrounded granule; little small pebble, subrounded; subrounded; wet; gray.	wet; gray. ittle granule, nall to large cobble, ; some silt; little		
25 Drilling Co	V O.:	Casc	ade		1	<u>nterralete</u>	Sampling Method <u>:Sonic [</u>	Drillina		
Driller:				ltz				•		
Drilling M							Water Level Start (ft. bgs.	.): 11		
Drilling FI		Wate						oc. <u>):</u>		
Remarks:				es that he arrived a		-				
				is certain that he er						
		tnat c	lepth.							
							East Coor:			



Soil Boring Log

Project Name: Former Kelsey-Hayes-Milford

Project Number: 30136112

Date Started: 05/16/2022

Sheet: 2 Logger: Christian Seidel

Date Completed: 05/20/2022 Editor: C Jeffers

Project Location: Milford, MI Weather Conditions: 70 F, Sunny

Depth (feet)	Sample Blow Counts	Recovery (in.)	Sample ID	PID (ppm)	USCS Class	Description	Construction Details	Well
26 27 28 29 30		60	SD	0.0		SAND, very fine to medium, subrounded; some silt; little granule; little small pebble, subrounded; trace large pebble, subrounded; wet; gray. SAND and SILT, very fine to fine sand, subrounded; trace granule, subrounded; trace small pebble; well sorted; wet; gray.		
31 31 32 33 34 35		6	SD	0.0		SAND with SILT, very fine to fine, subrounded; trace granule, subrounded; trace small pebble; well sorted; wet; gray. SAND, very fine to fine; little coarse, subrounded; trace silt; trace granule, subrounded; trace small to medium cobble; well sorted; wet; gray.		
36 37 38 39 40		22	VAP-01-02_35_40	0.0			(1.0-80.0' bgs) — Bentonite	
41		29	SD	0.0		SAND, fine to medium subrounded; well sorted; wet; gray. SAND, fine to medium, subrounded; little coarse to very coarse, subrounded; trace granule; trace small to medium cobbles, subrounded; wet; gray.		
46 47 48 49 50		60	VAP-01-03_45_50	0.3 0.0 1.1 0.0		SAND, fine to medium, subrounded; little coarse to very coarse, subrounded; trace granule; trace small cobble, subrounded; wet; gray. GRANULE, subrounded; little small to medium pebble, subrounded; little sand, subrounded; trace large pebble, subrounded; trace small cobble, subrounded; wet; gray. GRANULE and SAND, very fine to fine, subrounded; some silt; trace small to medium pebble; wet; gray. SAND, vine to medium, subrounded; some coarse sand, subrounded; little small to medium pebble; gray; wet.		
50 51 Remarks:				1.5		SAND, fine to medium; little very fine sand, subrounded; trace silt; trace granule, subrounded; trace small to medium cobble, subrounded; wet; gray.		



Sheet:

Soil Boring Log

Project Name: Former Kelsey-Hayes-Milford Date Started: 05/16/2022

Date Started: 05/16/2022 Logger: Christian Seidel

Date Completed: 05/20/2022 Editor: C Jeffers

Project Number: 30136112

Weather Conditions: 70 F, Sunny

Project Location: Milford, MI

Project Lo	CallOII	. <u>IVIIIIOI</u>	iu, ivii			 Weather Conditions. 70 F.	Suriny	
Depth (feet)	Sample Interva		Recovery (in.)	Sample ID	PID (ppm)	Description	Construction Details	Wel
53 53 54)	60	SD	0.8 0.5 2.9	SAND, fine to medium, subrounded; well sorted; wet; gray.		
55 56 57 58 59			60	VAP-01-04_55_60	16.2 1.1 0.2 2.3 10.8	SAND, fine to medium, subrounded; well sorted; wet; gray. SAND, fine to medium; some coarse sand; trace very coarse sand, subrounded; trace small to medium pebble, subrounded; poorly sorted; wet.		
60 61 62 63 64			18	SD	0.0 0.0 5.2	SAND, fine to medium; some coarse sand; trace very coarse sand, subrounded; trace small to medium pebble, subrounded; poorly sorted; wet. SAND, fine to medium; little very coarse sand; trace coarse sand; trace granule; trace small pebble, subrounded; wet; gray.		
65 66 67 68 69			48	VAP-01-05_65_70	NA	SAND, fine to medium; some coarse sand, subrounded; trace granule, subrounded; trace small to medium pebble, subrounded; trace small cobble, subrounded; wet; gray. PEBBLE, small and SAND, fine to medium, subrounded; trace cobble, subrounded; wet; gray. SAND, fine to medium, subrounded, and SILT; some small to medium pebble, subrounded; trace small cobble, subrounded; wet; gray. SAND, fine to medium, subrounded; some silt; little granule, subrounded; trace small to medium pebble, subrounded; trace small cobble, subrounded; trace small cobble, subrounded; some sand; little	(1.0-80.0' bgs) — Bentonite	
70 71 72 73 74 75			49	SD	0.0 0.0 0.2	SAND, very fine to medium; little large to very large pebble, subrounded; wet; gray. SAND, very fine to medium; little large to very large pebble, subrounded; wet; gray. SAND, very fine to medium; little large to very large pebble, subrounded; trace coarse sand, subrounded; trace granule, subrounded; wet; gray. SAND, very fine, some fine sand, subrounded; wet; gray. SAND, fine to medium, some very fine sand, little small		
76 77 77 78			60	VAP-01-06_75_80	NA	SAND, fine to medium, some very fine sand, little small pebble, subrounded; trace very coarse sand, subrounded; trace granule, subrounded; trace very large pebble; wet; gray. SAND, fine to medium, some very fine sand, some silt; little small pebble, subrounded; trace very coarse sand, subrounded; trace granule, subrounded; trace very large pebble; wet; gray.		

Remarks:



Sheet:

of

Soil Boring Log

Project Name: Former Kelsey-Hayes-Milford Date Started: 05/16/2022

Logger: Christian Seidel

Project Number: 30136112

Date Completed: 05/20/2022 Editor: C Jeffers

Weather Conditions: 70 F, Sunny

Project Location: Milford, MI

Blow Sample Depth Recovery PID **USCS** Construction Sample ID Description Well (feet) nterval (in.) (ppm) Details Counts 79 SAND, fine to medium; some very fine sand, little small (1.0-80.0)pebble, subrounded; trace very coarse, subrounded; trace bgs) granule, subrounded; trace very large pebble; wet; gray. Bentonite 80 SAND, very fine to medium; little silt; trace coarse sand, (80.0-82.0) subrounded; trace granule, subrounded; well sorted; wet; bgs) Choker 81 0.2 Sand 82 PEBBLE, small to medium, subrounded; some coarse to very 30 SD coarse sand; little granule, subrounded; trace medium 83 sand, subrounded; wet; gray. (82.0-93.0' bgs) Sand 84 0.1 PEBBLE, small to medium, subrounded; some coarse to very coarse sand; little granule, subrounded; trace medium Pack 85 sand, subrounded; trace large to very large pebble; wet; 86 PEBBLE, small to medium; some fine to medium sand, subrounded; little silt; trace large pebble, subrounded; wet; 87 (85.0-90.0) SAND, medium to coarse; little very coarse sand, VAP-01-07_85_90 15 bgs) 88 subrounded; trace granule, subrounded; trace small pebble, 0.2 subrounded; trace very large pebble, subrounded; wet; Stainless 89 Steel 10 Slot 90 Wire-Wrapped SAND, fine to medium; some coarse sand; trace very coarse Well sand, subrounded; well sorted; wet; gray. Screen 0.2 92 0.7 48 SD 93 0.2 (93.0-95.0' bgs) 94 0.5 Choker Sand 95 SAND, fine to medium; little medium to large pebble, subrounded; trace coarse sand, subrounded; trace granule, 96 subrounded; wet; gray. 0.2 0.4 SAND, very fine to medium, subrounded; some silt; little 60 VAP-01-08_95_100 medium to large pebble; trace coarse sand, subrounded; 98 0.2 trace granule, subrounded; trace very large pebble, subrounded; trace small cobble, subrounded; wet; gray 99 SAND, fine to medium; little medium to large pebble, 0.5 subrounded; trace coarse sand, subrounded; trace granule, subrounded; wet; gray. (95.0-130.0) 100 SAND, medium to very coarse, subrounded; trace granule, subrounded; trace small pebble; wet; gray. bgs) Bentonite 101 0.3 SAND, fine to coarse; some silt; little very coarse sand, subrounded; little clay; trace small to medium pebble, 102 subrounded; wet; gray. 0.4 PEBBLE, small to medium, subrounded; some coarse sand, SD 60 0.1 subrounded; some silt; trace large to very large pebble; 103 0.2 subrounded; wet; gray. PEBBLE, small to medium, subrounded; some coarse sand, 104 subrounded; some silt; trace very large pebble;

subrounded; trace small cobble, subrounded; wet; gray PEBBLE, small to large, subrounded; some medium to

coarse sand; little fine sand, subrounded; little silt; wet;

0.1

105 Remarks:

GDT



Soil Boring Log

Project Name: Former Kelsey-Hayes-Milford

Project Number: 30136112

Project Location: Milford, MI

Date Started: 05/16/2022

Sheet: 5 of 6 Logger: Christian Seidel

Date Completed: 05/20/2022

__ Editor: <u>C Jeffers</u>

Weather Conditions: 70 F, Sunny

Project Lo								Sunny	
Depth (feet)	Sample Interval	Blow Counts	Recovery (in.)	Sample ID	PID (ppm)	USCS Class	Description	Construction Details	Well
106 107 108 109 110			58	VAP-01-09_105_110	0.0 0.5 5.5 0.0 0.0		gray. SAND, medium to very coarse, subrounded; trace granule, subrounded; trace small pebble; wet; gray. SAND, fine to coarse, some silt; little very coarse, subrounded; little clay; trace small to medium pebble, subrounded; wet; gray. PEBBLE, small to medium, subrounded; some coarse sand, subrounded; some silt; trace large to very large pebble, subrounded; wet; gray. PEBBLE, small to large, subrounded; some medium to coarse sand; little fine sand, subrounded; little silt; wet; gray.		
111			63	SD	0.0 0.0 0.0 0.0		SAND, medium to coarse; trace very coarse sand, subrounded; trace small pebble, subrounded; wet; gray. SAND and SILT, very fine to medium sand; little very coarse sand, subrounded; little clay; trace small to medium pebble, subrounded; wet; gray. SAND and SILT, very fine to medium sand, subrounded; some small to large pebble, subrounded; little clay; wet; gray. PEBBLE, small to large; trace very lare pebble, subrounded; wet; gray.		
116			52	VAP-01-10_115_120	0.0 0.0 0.0 0.0		SAND, coarse to very coarse, subrounded; some granule, subrounded; little small to medium pebble; trace small cobble, subrounded; wet; gray.	(95.0-130.0' bgs) — Bentonite	
121			61	SD	0.0		PEBBLE, large to very large; trace small cobble, subrounded; wet; gray. GRANULE, subrounded; some coarse to very coarse sand, subrounded; little small to large pebble, subrounded; little silt; trace clay; wet; gray. SAND, coarse to very coarse, subrounded; little clay; trace medium sand, subrounded; trace granule, subrounded; trace small to large pebble, subrounded; wet; gray.		
126			60	VAP-01-11_125_130	NA		SAND, coarse to very coarse, subrounded; little clay; trace medium sand, subrounded; trace granule, subrounded; tace small to large pebble, subrounded; wet; gray. SAND, very fine, trace fine sand, subrounded; and SILT, rapid dilantancy; trace medium cobble; wet; gray. CLAY, very stiff, non-plastic, no dilatancy; trace small to medium pebble; dry; gray.		
131 131 132 Remarks:					4.1 1.0		CLAY, very stiff, non-plastic, no dilatancy; trace small to medium pebble; dry; gray.	(130.0-135.0' bgs) — Fill	



Sheet: 6 of 6 Date Started: 05/16/2022 Logger: Christian Seidel

Soil Boring Log
Project Name: Former Kelsey-Hayes-Milford Project Number: 30136112 Date Completed: <u>05/20/2022</u> Editor: C Jeffers

D II.	c I.	Blow	D		DID	LICCC		6	
Depth (feet)	Sample Interval	Counts	Recovery (in.)	Sample ID	PID (ppm)	USCS Class	Description	Construction Details	Well
133	$ /\backslash $		60	SD	1.1		CLAY, hard, non-plastic, no dilatancy; trace small to medium pebble; dry; gray. NOTE: Shows con	/130 0 ₋ 135 0'	
134					0.0		CLAY, hard, non-plastic, no dilatancy; trace small to medium	(130.0-135.0' bgs) — Fill	
135					0.7		pebble; dry; gray.		
136	-								
137	-								
138	-								
139	-								
140									
141									
142									
143									
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lemarks:									

ARCADIS	Design & Consultancy for natural and built asserts				Boring No.: C)W-16D2R2	
Soil Boring						Sheet: 1 of 4	
Project Name: Project Number:		-		Date Started: 07/20/2022	Logger: <u>C. Sei</u> Editor: <u>C. Jef</u>		
Project Location:			D	ate Completed: 07/20/2022 Weather C	Editor. <u>C. Jer</u> onditions: <u>70 F, </u>		
	DI.			1		J	
Depth Sample (feet) Interval	Blow Recovery (in.)	Sample ID	PID USCS (ppm) Class	Description		Construction Details Well	l
	60	НА		FILL; Hand Auger to 5 feet.		(0.0-1.0' bgs) Filter Pack Sand (0.0-85.0' bgs) 2"	
6 — 7 — 8 — 9 — 10	13	SD		FILL; silt and sand; roots; metal; glass; bl dark gray. NOTE: odor.	ack and gray to	PVC Well Casing	
11	53	SD		FILL; silt and sand; dark gray. SAND, very fine to fine; little medium sar sorted; wet; gray. SAND, fine to medium; some coarse san little granule; little small pebble; trace la subrounded; well sorted; wet; gray. SAND, very fine to medium, subrounded gray.	d, subrounded; rge pebble,	(1.0-90.0' bgs) Bentonite Chips	
15	50	SD		SAND, very fine to medium, subrounded large pebbles; subrounded; wet; gray. SAND, very fine to medium, subrounded gray.			
21	46	SD		SAND, very fine to medium, subrounded large pebbles, subrounded; well sorted; SAND, very fine to coarse, subrounded; little small pebble; trace so subrounded; poorly sorted; wet; gray. SAND, very fine to medium, subrounded granule; little small pebble, subrounded; subrounded; wet; gray.	wet; gray. ittle granule, nall to large cobble, ; some silt; little trace large pebble,		
2627				SAND, very fine to medium, subrounded granule; little small pebble, subrounded; subrounded; wet; gray.			
<u> </u>	Cascade			Sampling Method <u>:Sonic [</u>	•		
5		ltz					
Drilling Method:	<u>Sonic Drilling</u> Water						
0		ased on OW-16D2	 2R1		Yes	No	
	•			0 (5			
<u> </u>				N. 41 O			
<u></u>				East Coor:			



Boring No.: OW-16D2R2

Sheet:

of

Soil Boring Log

Project Name: Former Kelsey-Hayes-Milford

Project Number: 30136112

Project Location: Milford, MI

Date Started: 07/20/2022

Logger: C. Seidel/M. Olender

Date Completed: 07/20/2022 Editor: C. Jeffers

Weather Conditions: 70 F, Sunny

Depth Sample (feet)	Blow Counts	Recovery (in.)	Sample ID	PID (ppm)	USCS Class	Description	Construction Details	Well
28	>	60	SD			SAND and SILT, very fine to fine sand, subrounded; trace granule, subrounded; trace small pebble; well sorted; wet; gray.		
30 — — — — — — — — — — — — — — — — — — —		6	SD			SAND with SILT, very fine to fine, subrounded; trace granule, subrounded; trace small pebble; well sorted; wet; gray. SAND, very fine to fine; little coarse, subrounded; trace silt; trace granule, subrounded; trace small to medium cobble; well sorted; wet; gray.		
- 36 37 38 39 40		22	SD					
41 42 43 44 45		29	SD			SAND, fine to medium subrounded; well sorted; wet; gray. SAND, fine to medium, subrounded; little coarse to very coarse, subrounded; trace granule; trace small to medium cobbles, subrounded; wet; gray.	(1.0-90.0' bgs) Bentonite Chips	
- 45 - 46 - 47 - 48 49 - 50 - 50		60	SD			SAND, fine to medium, subrounded; little coarse to very coarse, subrounded; trace granule; trace small cobble, subrounded; wet; gray. GRANULE, subrounded; little small to medium pebble, subrounded; little sand, subrounded; trace large pebble, subrounded; trace small cobble, subrounded; wet; gray. GRANULE and SAND, very fine to fine, subrounded; some silt; trace small to medium pebble; wet; gray. SAND, vine to medium, subrounded; some coarse sand, subrounded; little small to medium pebble; gray; wet.		
51		60	SD			SAND, fine to medium; little very fine sand, subrounded; trace silt; trace granule, subrounded; trace small to medium cobble, subrounded; wet; gray. SAND, fine to medium, subrounded; well sorted; wet; gray. SAND, fine to medium, subrounded; well sorted; wet; gray.		



Boring No.: OW-16D2R2

Sheet:

of

Soil Boring Log

Project Name: Former Kelsey-Hayes-Milford

Project Number: 30136112

Project Location: Milford, MI

Date Started: 07/20/2022

Logger: C. Seidel/M. Olender

Date Completed: 07/20/2022 Editor: C. Jeffers

Weather Conditions: 70 F, Sunny

Depth (feet)	Sample Interval	Blow Counts	Recovery (in.)	Sample ID	PID (ppm)	USCS Class	Description	Construction Details	Well
57							SAND, fine to medium, subrounded; well sorted; wet; gray.		
58 59			60	SD			SAND, fine to medium; some coarse sand; trace very coarse sand, subrounded; trace small to medium pebble, subrounded; poorly sorted; wet.		
60	 \						SAND, fine to medium; some coarse sand; trace very coarse		
61							sand, subrounded; trace small to medium pebble, subrounded; poorly sorted; wet.		
62 63			18	SD			SAND, fine to medium; little very coarse sand; trace coarse sand; trace granule; trace small pebble, subrounded; wet;		
64 65							gray.		
66 6							SAND, fine to medium; some coarse sand, subrounded; trace granule, subrounded; trace small to medium pebble, subrounded; trace small cobble, subrounded; wet; gray. PEBBLE, small and SAND, fine to medium, subrounded;		
67 68			48	48	SD	SD	*** trace cobble, subrounded; wet; gray. SAND, fine to medium, subrounded, and SILT; some small to medium pebble, subrounded; trace small cobble, subrounded; trace small cobble, subrounded; wet; gray.		
69 70							SAND, fine to medium, subrounded; some silt; little granule, subrounded; trace small to medium pebble, subrounded; trace small cobble, subrounded; wet; gray.	(1.0-90.0'	
71					SD		PEBBLE, small to medium, subrounded; some sand; little large to very large pebble; trace small cobble, subrounded; wet; gray. SAND, fine to medium, trace coarse, subrounded; well	bgs) Bentonite Chips	
72 73			49	SD		sorted; wet; gray.			
74 74							SAND, very fine to medium; little large to very large pebble, subrounded; trace coarse sand, subrounded; trace granule, subrounded; wet; gray. SAND, very fine, some fine sand, subrounded; some silt,		
75 76							rapid dilatency; trace granule, subrounded; wet; gray. SAND, fine to medium, some very fine sand, little small pebble, subrounded; trace very coarse sand, subrounded; trace granule, subrounded; trace very large pebble; wet;		
77 78			60	SD			gray. SAND, fine to medium, some very fine sand, some silt; little small pebble, subrounded; trace very coarse sand, subrounded; trace granule, subrounded; trace very large		
79 79 80							SAND, fine to medium; some very fine sand, little small pebble, subrounded; trace very coarse, subrounded; trace		
80 81			30				granule, subrounded; trace very large pebble; wet; gray. SAND, very fine to medium; little silt; trace coarse sand, subrounded; trace granule, subrounded; well sorted; wet; gray.		
82 83				SD			PEBBLE, small to medium, subrounded; some coarse to very coarse sand; little granule, subrounded; trace medium sand, subrounded; wet; gray.		
84 84									



Boring No.: OW-16D2R2

Sheet: 4 of 4

Soil Boring Log Project Name: Former Kelsey-Hayes-Milford

Date Started: 07/20/2022 Logger: C. Seidel/M. Olender

Project Number: 30136112

Date Completed: 07/20/2022 __ Editor: <u>C. Jeffers</u>

Depth (feet)	Sample Interval	Blow Counts	Recovery (in.)	Sample ID	PID (ppm)	USCS Class	Description	Construction Details	Well
86 87 88 89			15	SD			PEBBLE, small to medium, subrounded; some coarse to very coarse sand; little granule, subrounded; trace medium sand, subrounded; trace large to very large pebble; wet; gray. PEBBLE, small to medium; some fine to medium sand, subrounded; little silt; trace large pebble, subrounded; wet; gray. SAND, medium to coarse; little very coarse sand, subrounded; trace granule, subrounded; trace small pebble, subrounded; trace very large pebble, subrounded; wet; gray.	(1.0-90.0' bgs) Bentonite Chips	
90 91 91 92 93 94 95			48	SD			SAND, fine to medium; some coarse sand; trace very coarse sand, subrounded; well sorted; wet; gray.	(90.0-92.0' bgs) Choker Sand	
95 96 97 98 99			60	SD			SAND, fine to medium; little medium to large pebble, subrounded; trace coarse sand, subrounded; trace granule, subrounded; wet; gray. SAND, very fine to medium, subrounded; some silt; little medium to large pebble; trace coarse sand, subrounded; trace granule, subrounded; trace very large pebble, subrounded; trace small cobble, subrounded; wet; gray SAND, fine to medium; little medium to large pebble, subrounded; trace coarse sand, subrounded; trace granule, subrounded; wet; gray.	(92.0-103.0' bgs) Sand Pack (95.0-100.0' bgs) 2" Stainless Steel	
101 102 103 104			60	SD			SAND, medium to very coarse, subrounded; trace granule, subrounded; trace small pebble; wet; gray. SAND, fine to coarse; some silt; little very coarse sand, subrounded; little clay; trace small to medium pebble, subrounded; wet; gray. PEBBLE, small to medium, subrounded; some coarse sand, subrounded; some silt; trace large to very large pebble; subrounded; wet; gray. PEBBLE, small to medium, subrounded; some coarse sand, subrounded; some silt; trace very large pebble; subrounded; some silt; trace very large pebble; subrounded; some silt; trace very large pebble; subrounded; trace small cobble, subrounded; wet; gray.	10 Slot Wire-Wrapped Well Screen (103.0-105.0' bgs) Choker Sand	
105 106 107 108 109 110 111							PEBBLE, small to large, subrounded; some medium to coarse sand; little fine sand, subrounded; little silt; wet; gray. SAND, medium to very coarse, subrounded; trace granule, subrounded; trace small pebble; wet; gray.		
113 - emarks	:								

PRO	JECT:	For	mer L	ucas Varity Milfo	ord Fa	cility		LOCATION: 101 Oak St., Milford, M	II/Village of Milford Pa
				0-213-C02				SURFACE ELEVATION:	
				1: <i>11/19/97 - 12</i>				INITIAL H20 LEVEL: 8 Feet BGL	
				4.25 inch ID Ho				STATIC H20 ELEV.:	
				Screened Auge				TOTAL DEPTH: 129.5 Feet	
DKII	LLING	CUMP			entai,	Sie	rns Drilling	LOGGED BY: (124)	7
	PLE NO	.5 ft.	PIC	(relative ppm)	50	CLASS			WELL DIAGRAM
feet	LAB SAMPLE	BLOWS/0.5	VALUES	PROFILE 200	GRAPHIC LOG	צסור כרי		GEOLOGIC DESCRIPTION	T (
-		<u> </u>		200	بشا	PT	PEAT		
5-						SM	material, li	e to coarse, some silt and organic Ittle clay, trace gravel, moist, dark black brown in cuttings.	
+							saturated		
0	W16D-							n to light brown 10' BGL auger sample from 10'–15' BGL; low d.	Steel Casing —————
1 1 1	w16D-2						SAND-SIL saturated,	T: fine to coarse sand, some silt, brown in cuttings.	2" dia. Galvanized
5-1-1-0-W	1160-3						Screened a water yield.	auger sample from 30'-35' BGL: fair	

Ply	echna mouth,	Mich	nigan		ord F	acility		Log of Monitoring Well OW16D/D2 LOCATION: 101 Oak St., Milford, MI/Village of Milford Pai		
		#		(relative ppm)						
OEPTH feet	LAB SAMPLE NO	BLOWS/0.5	VALUES	PROFILE	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	WELL DIAGRAM		
-	DW18D-4			U		SP	SAND: coarse, some gravel, saturated, brown in cuttings. Screened auger sample from 40'-45' BGL: good water yield.	333333333333333333333333333333333333333		
50-0)WI6D-5						Screened auger sample from 50'-55' BGL: very good water yield.	Steel Casing		
55-	W16D-6						Screened auger sample from 60'-65' BGL: good water yield.	2" dia. Galvanized Steel Casing		
0-6	W18D-7						Screened auger sample from 70'-75' BGL: fair water yield.			

Techna	Corporation
Plymouth,	Michigan

Log of Monitoring Well OW16D/D2

	mouth,							
PRO		For	mer L	ucas Varity Milfo	ord Fa	cility	LOCATION: 101 Oak St., Milford, M	AI/Village of Milford Park
DEPTH feet	LAB SAMPLE NO.	BLOWS/0.5 ft.	ALUES	PROFILE	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	WELL DIAGRAM
1 1 1			_>	U 200		SP		3000000
80-)W18D-8					GP	SAND-GRAVEL: saturated. Logged from cuttings and drilling indications. Screened auger sample from 80'-85' BGL: good water yield.	n 2" dia. Galvanized Steel Casing —— Bentonite
90-	о ж 160-9						Screened auger sample from 90'-95' BGL: excellent water yield.	0.010" Slot, Galvanized Steel Screen 2" dia. Galvanized Steel Screen 1
95-								0.010" Slot, Galva
00-0	W16D-10	0					Screened auger sample from 100'-105' BGL: fair water yield (OW16D-10), Temporary well sample from 100'-105' BGL: excellent water yield (OW16D2-10).	←
105-	M16D2-						Temporary well sample from 110'-115'BGL:	Naa
115—	NIOU2-						excellent water yield.	

Page 3 of 4

	chna mouth,			ation			Log of Monitoring V	Log of Monitoring Well OW16D/D2		
PRO	JECT:	For	mer L	ucas Varity Milf	ord Fa	cility	LOCATION: 101 Oak St., Milford, M.	//Village of Milford Park		
	₩ 12 12 13 13 13 13 13 13 13 13 13 13 13 13 13	#	PI	O (relative ppm)	g	S				
DEPTH feet	LAB SAMPLE NO	BLOWS/0.5	VALUES	PROFILE	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	WELL DIAGRAM		
-	W16D2~	2				GP	Temporary well sample from 120'–125' BGL: excellent water yield.	Natural Collapse		
125-						CL	Cobbles CLAY: some silt, trace sand and gravel, medium plasticity, hard, moist, gray brown.			
a	W16D2-	61					¥7			
30-					124		END OF BORING	<u> </u>		
- - - 135— -							Note: Auger failure during screened—auger vertical profiling activities at 0W16D. Approximately 95' of auger remain down hole estimated from 15' to 110' BGL. Offset 21' to east of 0W16D to complete vertical profiling activities at 0W16D2 using temporary well sampling methods.	-		
40-								-		
45-								-		
50-								-		
55-										

Exhibit B

Water Systems Engineering Letter

Water Systems Engineering Inc.

September 29, 2022

John McInnis Arcadis 28550 Cabot Drive, Suite 500 Novi, Michigan 48377

Re: WSE Lab Report No. 22457 - ZF North America Inc. Well OW-16D2

Mr. McInnis:

Thank you for sharing the well log, video survey, and additional sampling data for Well OW-16D2.

The behavior of the water chemistry and pumping of the well is unusual to say the least. In looking at several parameters and the operational activity, I suspect the well may be experiencing a breach in the casing and/or the degradation/failure of the grout. Some of the things that lead me to this conclusion include: the oxidative ORP in the well in comparison to the aquifer conditions, the presence of plant particulate in both samples we evaluated, and the evidence of corrosion in the downhole video to include: collar near surface, linear accumulation of corrosion by-products and/or damage, and the mass of build-up just above the screened section. Additionally, the erratic drawdown behavior observed over the past year further indicates some disruption in the borehole or borehole/aquifer interface is occurring.

While the video did not show a specific breach, nor was a specific surface or shallow subsurface microorganism identified, these conditions suggest that issues are occurring or developing that are beyond what we would consider normal fouling or ageing of the well structure. Given the use of galvanized materials in the original well construction, I do not believe that the well could withstand the physical cleaning and reconstruction necessary to address the current concerns, nor would it significantly alter the design to alleviate the potential reoccurrence of the suspected problems.

Best Regards,

Michael Schnieders, PG, PH-GW

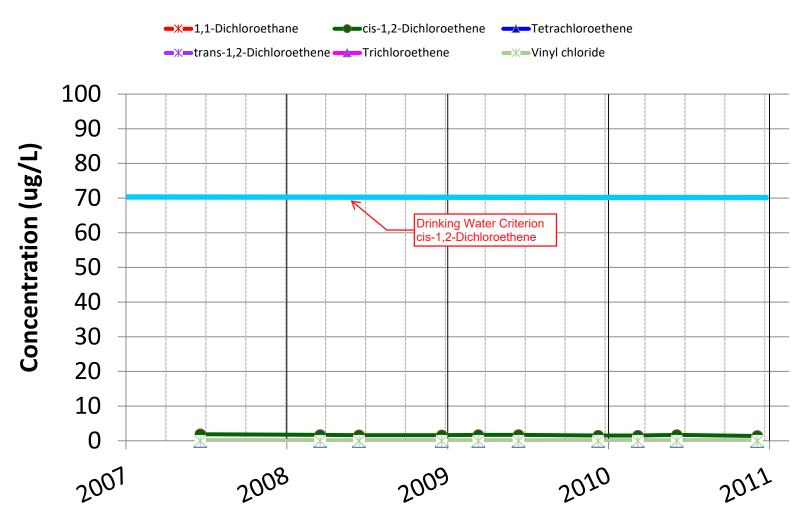
limeder

Hydrogeologist

Exhibit C

Trend Graphs (OW-9 and OW-18 Series of Wells)

OW-09

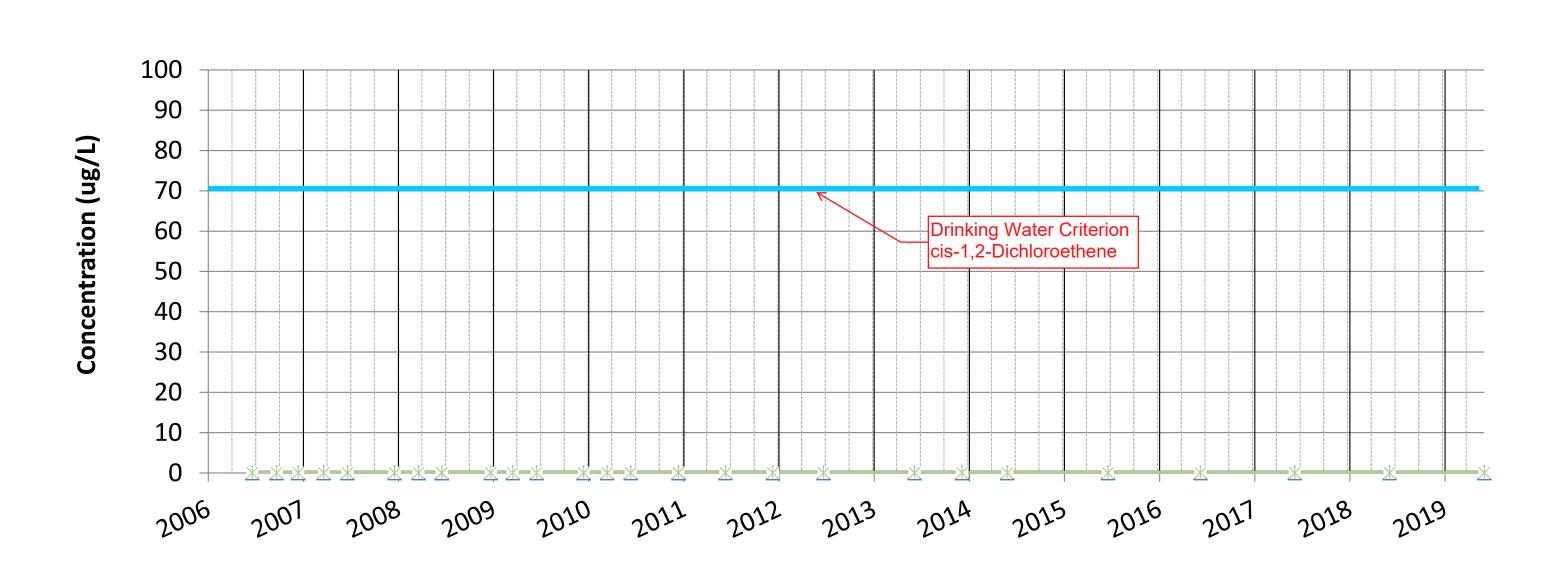


OW-09-ML-A

─Tetrachloroethene **─**X─trans-1,2-Dichloroethene

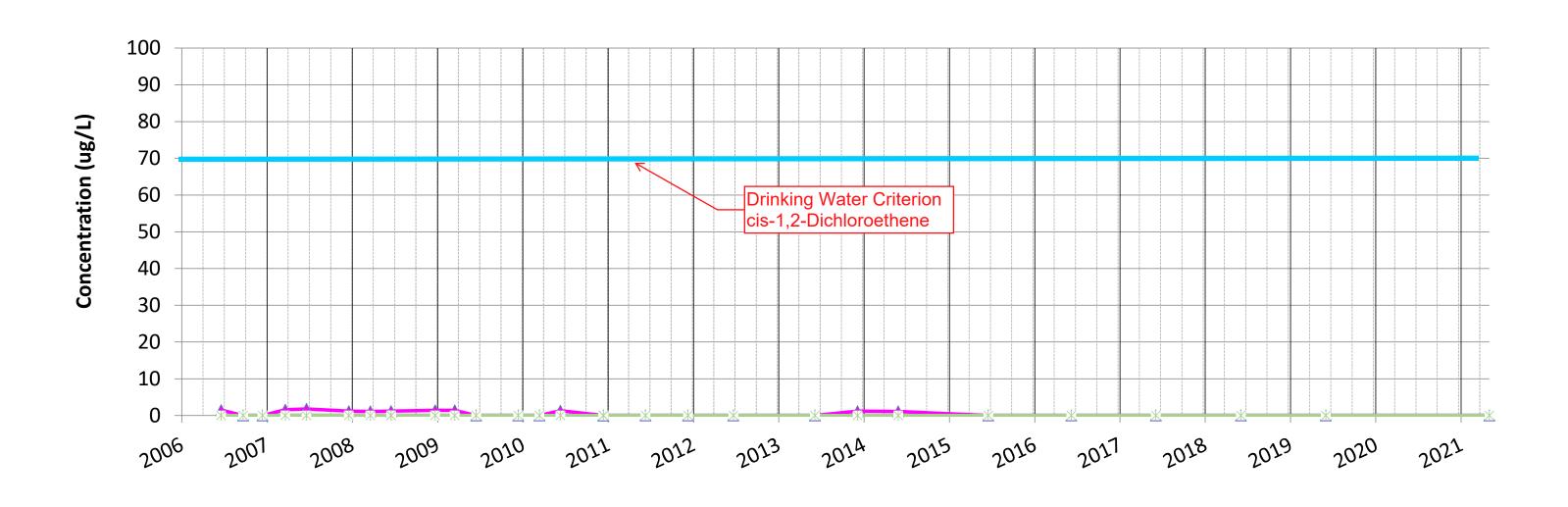
Trichloroethene =X=Vinyl chloride

—X—1,1-Dichloroethane **——**cis-1,2-Dichloroethene

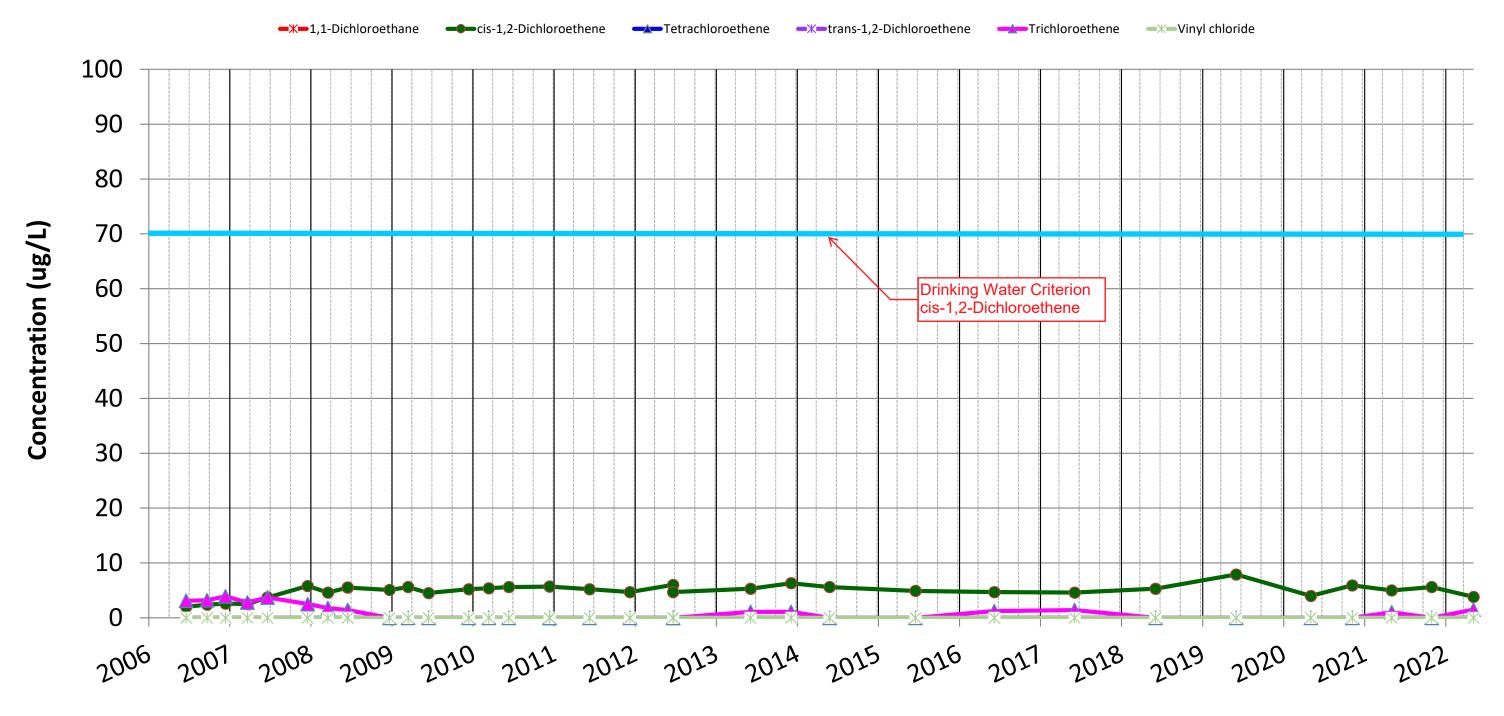


OW-09-ML-B

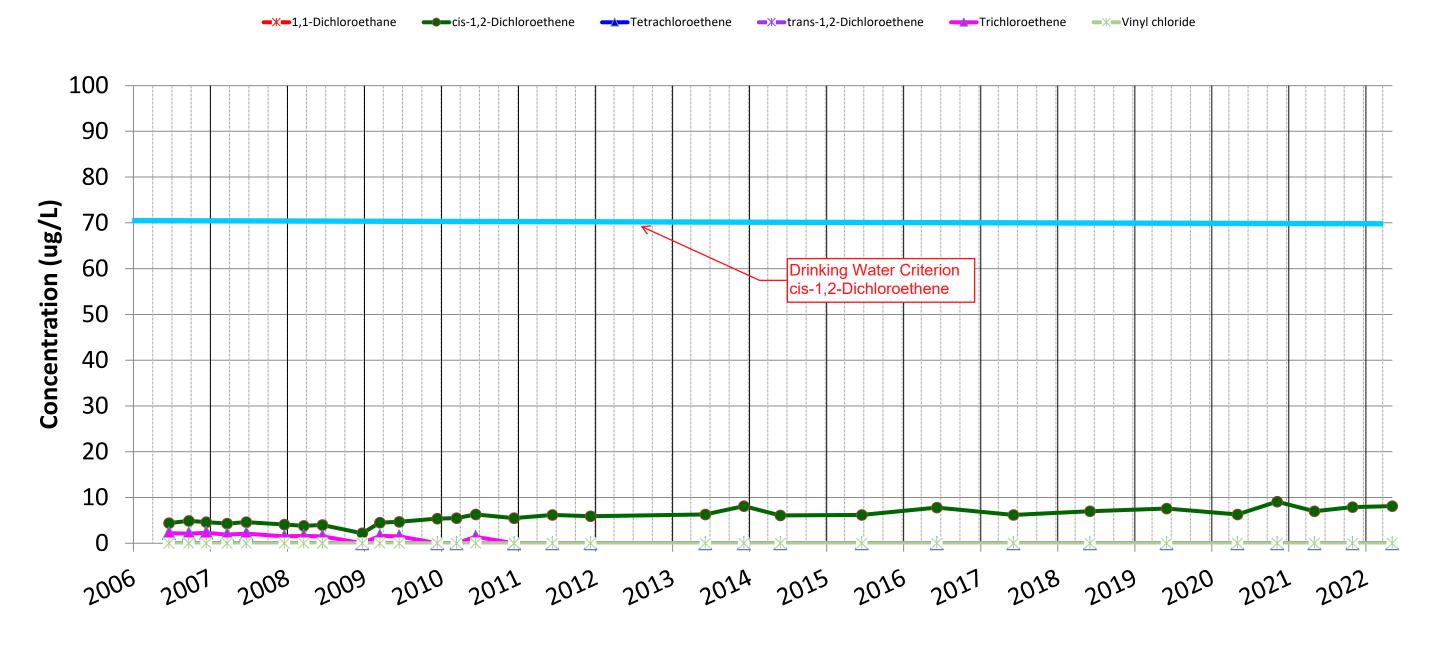
—X—1,1-Dichloroethane **——**Cis-1,2-Dichloroethene **——**Tetrachloroethene **——**Trichloroethene **——**Trichloroethene **——**Trichloroethene **——**Trichloroethene



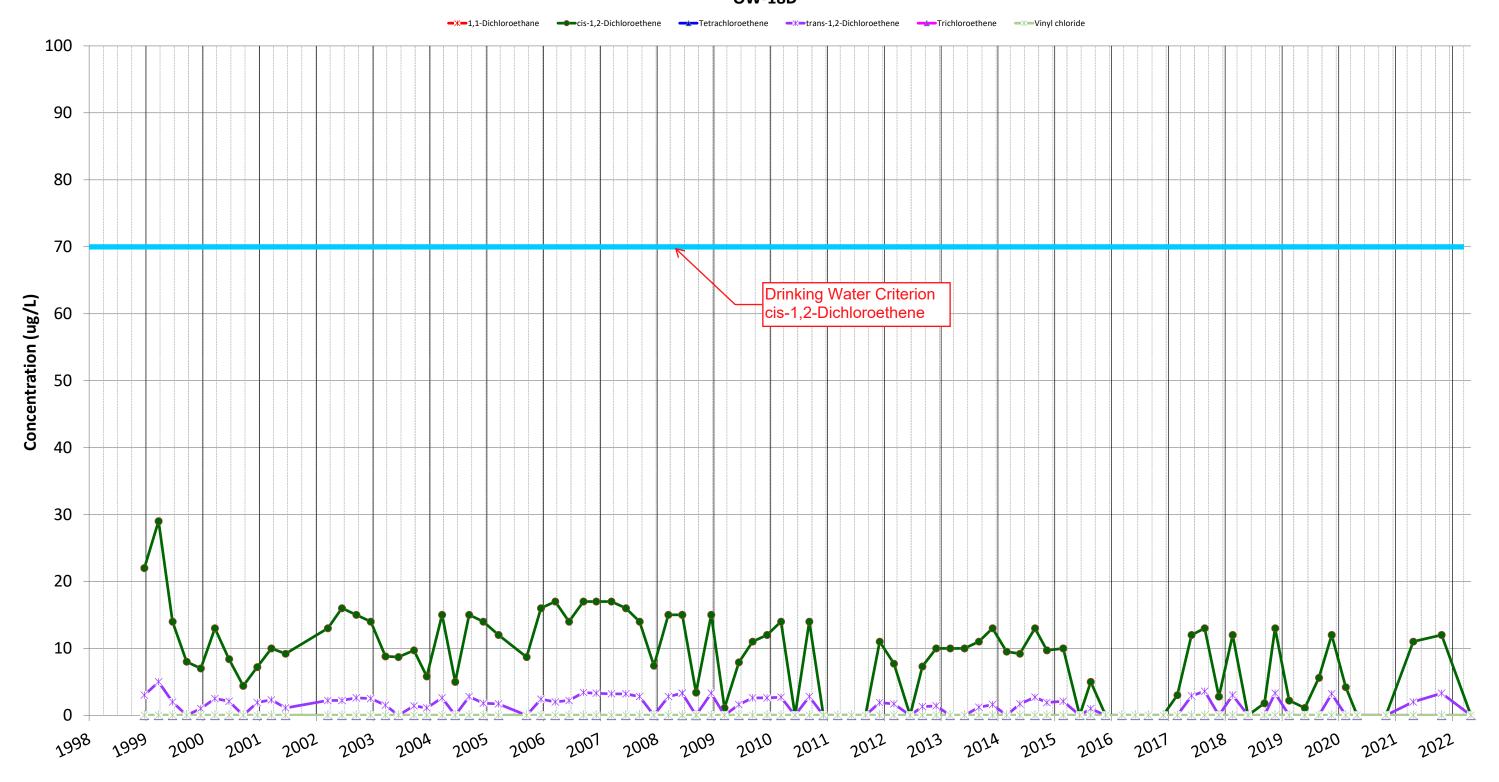
OW-09-ML-C



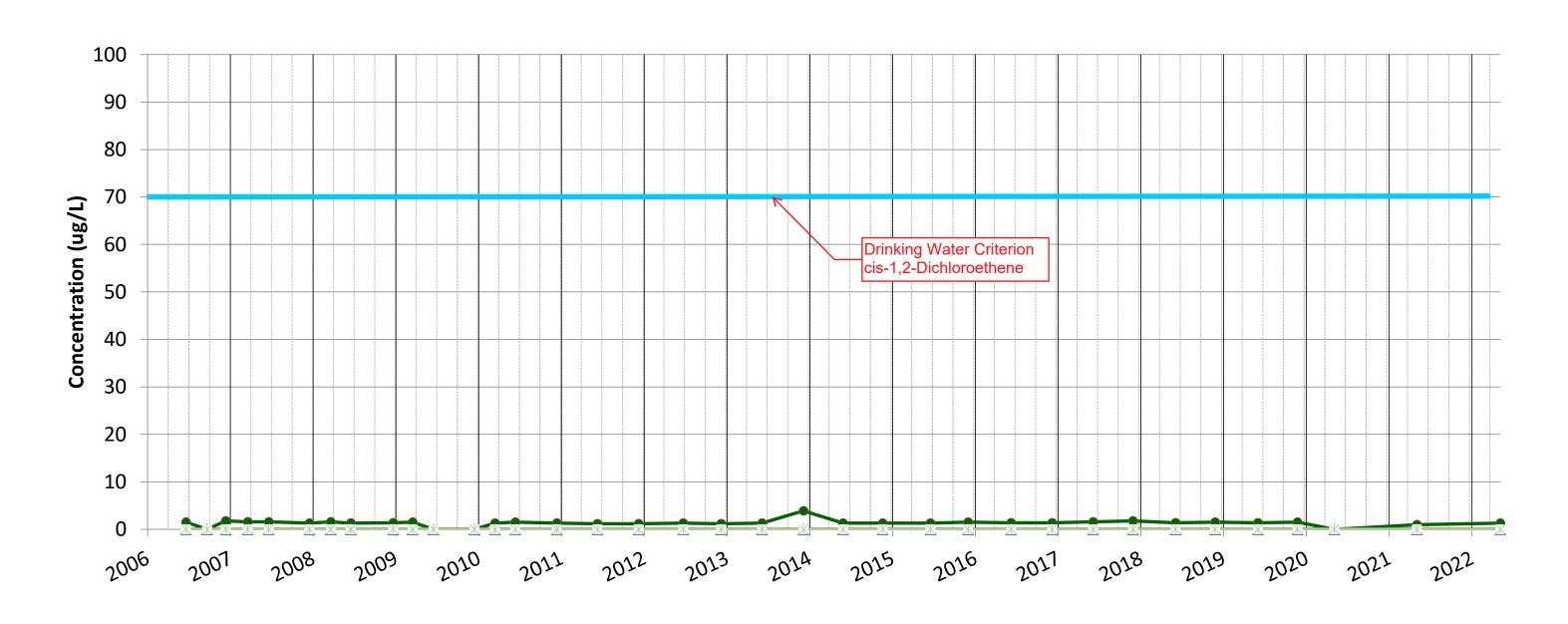
OW-09-ML-D

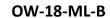


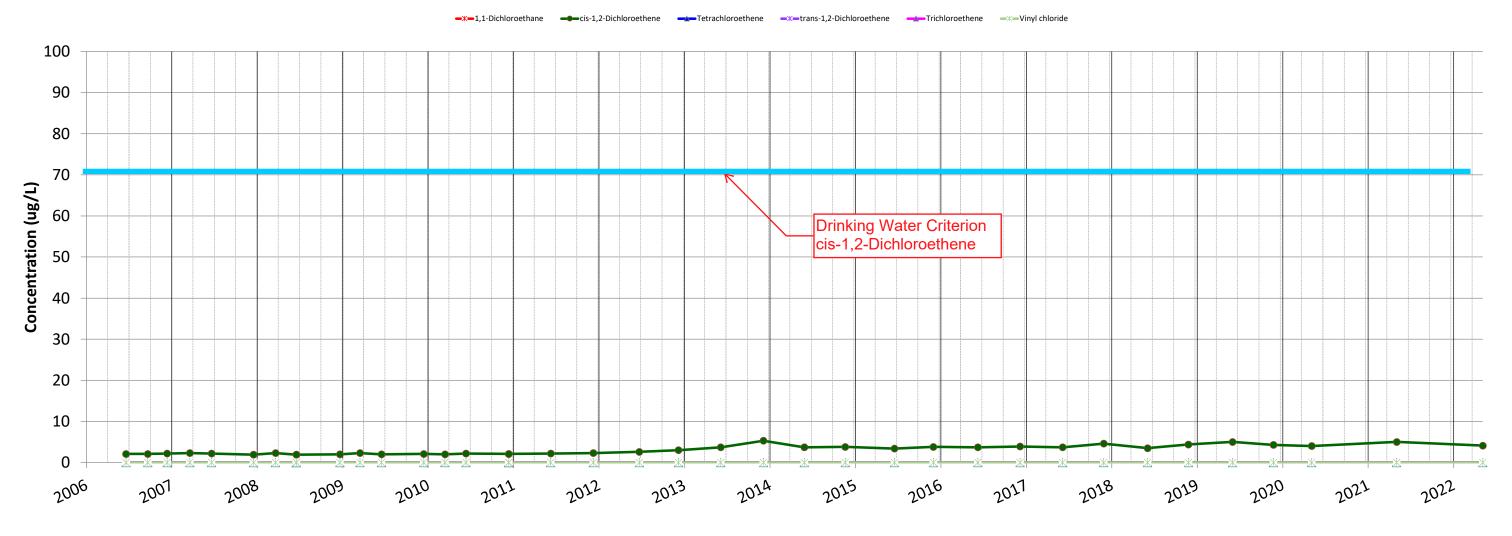


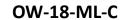


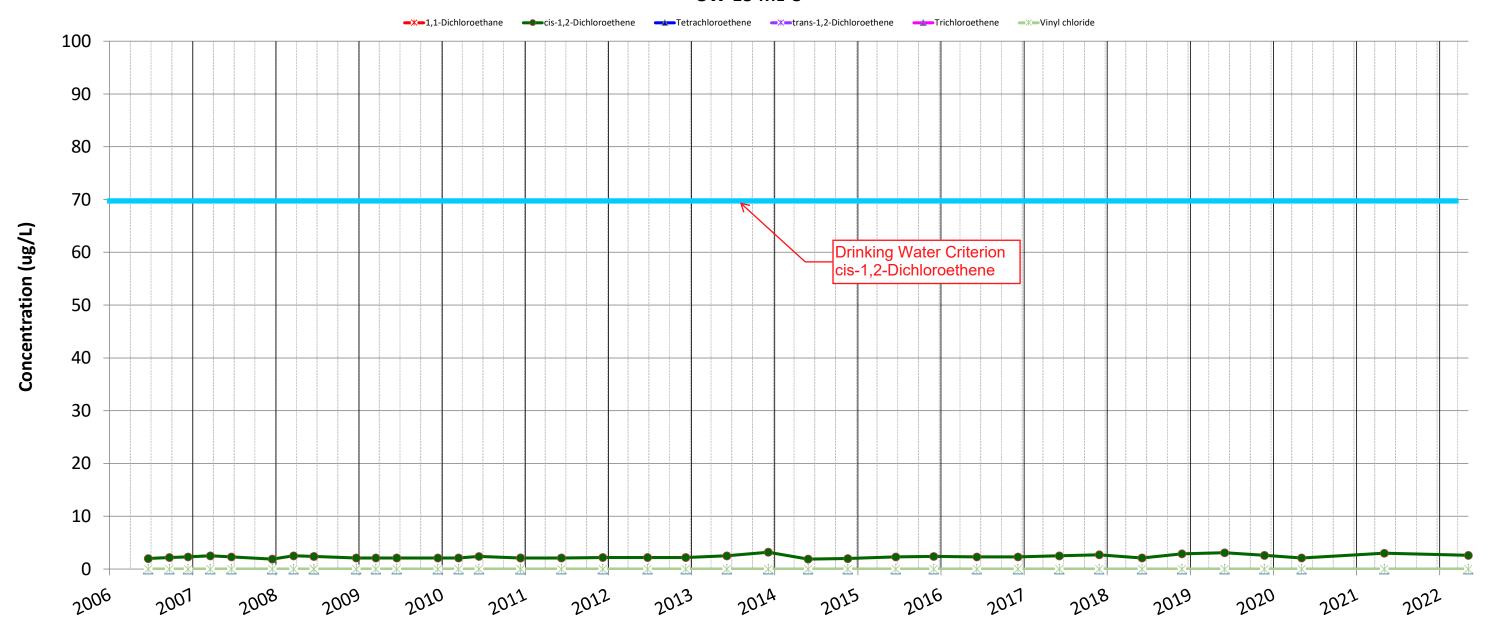
OW-18-ML-A

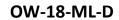


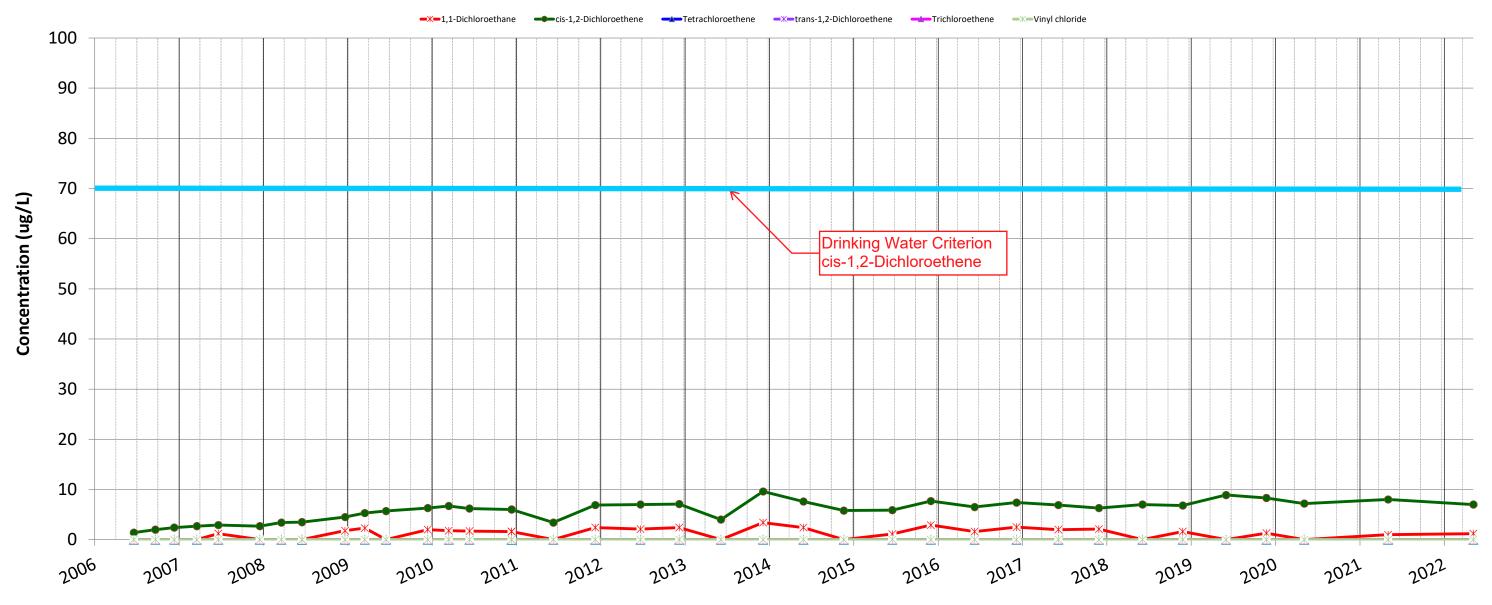












OW-18-ML-E

